

National Fire Sprinkler Magazine

The Flagship Publication of The National Fire Sprinkler Association

May-June 2022

No. 232



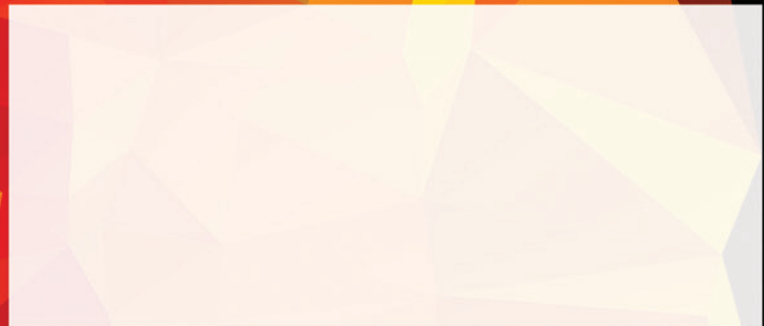
2022 BUYER'S GUIDE ISSUE

Inside this issue:

**Fires in Waste Management and Recycling
Facilities Caused by Lithium-Ion Batteries**
page 11

Codes for Phased Retrofit Installation
page 13

A Buyer's Guide to: Learning & Development
page 19



Special Solutions for Special Hazards

Reliable® is your source to meet today's challenges

Compact, easy-to-service diaphragm deluge valves. Medium Velocity nozzles supported by a comprehensive library of 3D CAD blocks. Fluorine-free foam solutions. Designed, assembled, and tested in the USA.



Model DDV
Diaphragm Deluge
Valve with pressure ratings up to 400 psi, DDVs feature one moving part, no trim connections to the valve cover, UL Listed, FM Approved, 1 ½" - 8" sizes

MV Medium
Velocity Nozzles with nine orifice sizes and eight nozzle deflector options for 72 spray patterns



SOLBERG® Foams
from Perimeter
Solutions® offering a comprehensive line of fluorine-free firefighting foam and foam hardware

Contact us for a quote or technical support on your next special hazards project.

reliablesprinkler.com/industrial

Snowy River
Hydroelectric
Facility, Australia

Reliable®

SOLBERG® is a registered trademark of SOLBERG, a Division of Perimeter Solutions LP or its Affiliates.



ON THE COVER

We are proud to present our annual Buyer's Guide issue. Be sure to consult the listings and BUY NFSA!

ADVERTISERS

AGF	8
American Backflow	16
Argco	26
ASC	18
Bull Moose	22
Compufire	59
Core & Main	52
Ferguson	BC
Gast Manufacturing	IBC
General Air	20
Harrington	3
Hose Monster	17
Metraflex	51
NFPA	38-39
Reliable	IFC
SnapDrill	14
Talco	6
Viking	10

EDITOR

JOANNE GENADIO

DESIGNER

JOHN L. SULLIVAN/SULLIVAN Design

"National Fire Sprinkler Association reserves the right to accept or reject any advertisement for any reason, in its sole discretion."

National Fire Sprinkler Magazine (ISSN 1050-2958) (USPS 524-010), is published bimonthly (January/February, March/April, May/June, July/August, September/October, November/December) by the National Fire Sprinkler Association, Inc., 514 Progress Drive, #A, Linthicum Heights, MD 21090. Periodicals Postage is Paid at Linthicum Heights, MD, and at additional mailing offices.

Subscription free to NFSA members and member companies.

POSTMASTER: Send address changes to:
NFSA, 514 Progress Drive, Suite A,
Linthicum Heights, Maryland 21090

or update your membership profile at www.nfsa.org

National Fire Sprinkler Magazine

The Flagship Publication of The National Fire Sprinkler Association

May/June 2022 • No. 232

FEATURES

- 27** **2022 Buyer's Guide**
- 57** **NFSA Hits the Road with Virtual Reality Side-By-Side Burn Kits**
by Suzanne Mayr, NFSA Northwest Regional Manager

DEPARTMENTS

- 2** **Calendar**
- 5** **From the President's Desk** *-by Shane Ray*
Buy NFSA: And All the Reasons and Levels That Make Sense!
- 7** **From the Chair's Desk** *-by Jim Boulanger*
Family
- 9** **Contractor's Cue**
- 11** **Tech Speaking** *-by Jeff Dunkel, PE*
Fires in Waste Management and Recycling Facilities Caused by Lithium-Ion Batteries
- 13** **Code Corner** *-by Jeffrey M. Hugo, CBO*
Codes for Phased Retrofit Installation
- 19** **Learning & Development Insights** *-by Dani Francis*
A Buyers Guide to: Learning & Development
- 21** **New Members**
- 23** **Notes from the Fire Scene** *-by Vickie Pritchett*
Our Members Make the Difference!
- 24** **Fire Sprinklers in Action**
- 53** **ITeM** *-by Vincent Powers*
It is a Question of Flow
- 59** **Social Scene** *-by Joanne Genadio*
Wandering in Where I Didn't Belong?
- 60** **HQ News**
- 61** **Chapters in Action**
- 63** **People**
- 64** **Sprinklering of News**
- 69** **Area News**

CONTENTS



UPCOMING TECH TUESDAYS

Editor's note: The following Tech Tuesday listings were current at the time of publication. Please go to the Learning & Development page of the NFSA website to view our latest offerings.



MAY 2022

Environmental & Trending Issues: Lithium Batteries

When: May 17, 2022, from 12:30 PM to 01:30 PM (ET)

JUNE 2022

Environmental Issues with ITM

When: Jun 21, 2022, from 12:30 PM to 01:30 PM (ET)

JULY 2022

Best of NFSA's Expert of the Day: NFPA 13 – Installation Rules

When: Jul 19, 2022, from 12:30 PM to 01:30 PM (ET)

AUGUST 2022

Best of NFSA's Expert of the Day: NFPA 13 – Discharge Rules

When: Aug 16, 2022, from 12:30 PM to 01:30 PM (ET)

SEPTEMBER 2022

Best of NFSA's Expert of the Day: NFPA 14 – Standpipes

When: Sep 20, 2022, from 12:30 PM to 01:30 PM (ET)

OCTOBER 2022

Best of NFSA's Expert of the Day: Model Codes – ICC and NFPA

When: Oct 18, 2022 from 12:30 PM to 01:30 PM (ET)

NOVEMBER 2022

Best of NFSA's Expert of the Day: NFPA 25 – ITM

When: Nov 15, 2022 from 12:30 PM to 01:30 PM (ET)

DECEMBER 2022

Best of NFSA's Expert of the Day: NFPA 20 – Fire Pumps

When: Dec 20, 2022 from 12:30 PM to 01:30 PM (ET)



NATIONAL FIRE SPRINKLER ASSOCIATION, INC.

BOARD OF DIRECTORS:

- JAMES BOULANGER**, Chair
Patriot Fire Protection
- JAMES GOLINVEAUX**, Vice-Chair
Viking Group
- ZARKO OGNJENOVIC**, Treasurer
Milton J. Wood
- JUSTIN GEY**, Director-at-large
Wayne Automatic Fire Sprinklers
- JON ACKLEY**
Dalmatian Fire, Inc.
- BILL BALL**
Grunau Company
- AARON BENNETT**
RCI Systems
- KEN BRINKLEY**
Music City Fire Sprinkler
- JIM McHUGH**
AGF Manufacturing
- JOHN DELUCA**
SRI Fire Sprinkler, LCC
- KEVIN T. FEE**
Reliable Automatic Sprinkler Company
- MARK FESSENDEN**
Johnson Controls
- NANCY HAMMONDS**
Reliance Fire Protection
- PETER HULIN**
Superior Automatic Sprinkler Corporation

- JOHN KAUFFMAN III**
Kauffman Company
- JAMES LEWIS**
American Fire Sprinkler Corporation
- LAINEY LIOTTA**
Lubrizol
- KENT MEZAROS**
Quick Response Fire Protection

- HAROLD NOTHHAFT II**
L. Nothhaft & Son
- LAWRENCE THAU**
Victaulic Company
- STEVE ULMER**
API Group
- TERRY VICTOR**
Johnson Controls/Grinnell Fire Protection Solutions
- DANIEL WAKE**
Victaulic
- SHANE RAY**
NFSA
- FRED BARALL**
General Counsel
- VICKIE PRITCHETT**
Corporation Secretary

STAFF:

- PRESIDENT**
SHANE RAY
- VICE PRESIDENT/EXECUTIVE OFFICER**
VICKIE PRITCHETT
- SENIOR VICE PRESIDENT OF INDUSTRIAL RELATIONS AND GENERAL COUNSEL**
FRED BARALL
- VICE PRESIDENT OF CODES, STANDARDS & PUBLIC FIRE PROTECTION**
JEFF HUGO
- DIRECTOR OF FINANCE & ADMINISTRATION**
ALEXANDER SIU

- DIRECTOR OF OPERATIONS**
DENNIS WOOD
- DIRECTOR OF FIELD OPERATIONS/ GOVERNMENT RELATIONS**
GARY WEST
- DIRECTOR OF CONTRACTOR SERVICES/ CHIEF ENGINEER**
MIKE JOANIS, PE

- DIRECTOR OF MEMBERSHIP**
CALEB ARMBRUST
- MANAGER OF CODES AND STANDARDS**
ROLAND ASP
- FIRE PROTECTION ENGINEER**
JEFF DUNKEL, PE
- MARKETING MANAGER & NFSM EDITOR**
JOANNE GENADIO
- CODES AND STANDARDS SPECIALIST**
JOHN SWANSON

- LEGAL/LABOR RELATIONS COORDINATOR**
LANCE GUNNELLS
- PUBLIC FIRE PROTECTION SPECIALIST**
TERIN HOPKINS

- ITM SPECIALIST**
VINCE POWERS
- MANAGER OF LEARNING & DEVELOPMENT**
EVAN COMBS

- MEMBERSHIP AND OUTREACH COORDINATOR**
ABBIE GUNNELLS

- MEMBERSHIP AND CHAPTER SPECIALIST**
MICHAEL WILSON

- SPECIAL PROJECTS COORDINATOR**
MICHAEL PHILLIP

- INSTRUCTIONAL TECHNICIAN**
DAVID NUTTER

- EVENT COORDINATOR**
DANIELLE FRANCIS

- ADMINISTRATIVE ASSISTANT**
TOBI HUNTER

REGIONAL MANAGERS:

- BRIAN BIGGS**
- LORRELL BUSH**
- TIM BUTLER**
- CYNTHIA GIEDRAITIS**
- SUZANNE MAYR**

STATE COORDINATORS:

- TOM BRACE**
- JAMES BROWN**
- DAVID DAVIS**
- FRANK ELLIS**
- MARTY KING**
- PAUL ZBIKOWSKI**

FIELD SERVICE COORDINATORS:

- ROB GEISLINGER**
- RON RITCHEY**

IP DIRECTORS:

- ERIK HOFFER – CHICAGO**
- DAVE KURASZ – NEW JERSEY**

IP SPECIALISTS:

- ROBERT ROWE – LOS ANGELES**
- JOHN LAVENTURE – ST. LOUIS**

LOCAL COORDINATORS

- DAVE DAVIS – NEW JERSEY**
- PAUL RICHARD – ST. LOUIS**
- JOEL HEWITT – MINNEAPOLIS**

ACCOUNTING:

- MIAISHIA McKENZIE**, *Accounting Clerk*
- MELISSA LUTZI**, *Staff Accountant*
- MARYAM MEMON**, *Senior Accountant*





Harrington, Inc.

FAMILY OWNED BUSINESS SINCE 1988



Your Storz Quick Connect Specialist

Threaded Adapters



LDH System Specialists

- Made to Order
- Forged Storz Heads
- Anodized to Military Specs
- Straight FDC Adapters
- Storz Elbow Adapters
- Quick Delivery

Straight Flange Adapters



Storz x Male Adapters



Threaded x Storz Elbow Adapters



NEW Low-profile Storz X NPT-Female



MAKE THE RIGHT CONNECTION!

2630 West 21st Street. Erie, PA 16506 • 800.553.0078 • harrinc.com • info@harrinc.com • hydrantstorz.com

BUY NFSA

LOOK FOR THE LOGO



Brought to you by the NFSA SAM Council

To see a full list of SUPPLIERS & MANUFACTURERS (SAM) Council Members and product updates, visit nfsa.org/SAM



@NFSAorg -
engage in our
#fastestwater
conversation!



facebook.com/
NFSAorg



514 Progress Drive, Suite A
Linthicum Heights, MD 21090
(443) 863-4464 • nfsa.org

Fire is fast. Fire sprinklers are faster.

Buy NFSA: And All the Reasons and Levels That Make Sense!

Members buying from members. State and local Chambers of Commerce do it, why shouldn't the fire sprinkler industry do it? You may have heard the term, which I hope you have, *Fire Sprinklers Buy Time... Time Buys Life*. Well, we have also coined the phrase, *Buy NFSA*. This is to promote our SAM (Suppliers and Manufacturers) Council and our Manufacturers Council, but it's also for everyone who needs a fire sprinkler system designed, installed, or maintained. Any request we get on our website, including products and services, designs, maintenance and installation, we drive to NFSA members. Supporting NFSA members supports the fire sprinkler industry. The more you invest, the more we invest, and the more return we all get. Most importantly, it supports our mission.



There's so much about NFSA that you want to buy, and you don't really have to pay for it, because our members already receive member value from what they fund. If we want more, we must buy MORE. With record growth in the fire sprinkler industry over the last three years, it is obvious, people are buying (building) more.

We have gotten Congress to buy into NFSA and our mission. There are fire sprinkler incentives in place and there's more to come. A big thank you goes to our DC Lobbyist Andy Quinn, along with NFSA's Vickie Pritchett, for working daily to make sure that fire sprinklers are included in all that is happening, and happening fast, in Washington, D.C. Following the tragic Bronx fire in New York City, Andy and Vickie quickly engaged with New York Senators Chuck Schumer and Kirsten Gillibrand.

There has been a lot of funding promised to ensure fire sprinklers are included in more public housing across the country, as witnessed in Minnesota. The funding is provided by the U.S. Department of Housing and Urban Development (HUD). A special thanks to our team on the ground and most importantly, our Minnesota members. They have supported NFSA, and now the return is coming back to support our mission directly.

Let's look at what we have ensured was allocated for fire sprinkler incentives and retrofits in recent years:

- **Tax Cuts and Jobs Act** – Provided accelerated depreciation for the retrofit of fire sprinklers in all commercial buildings. (Tragic Fire – Station Night Club – 2003)
- **CARES Act** – required HUD to identify the housing problem and cleaned up the Tax Cuts and Jobs Act to make sure corporations, not just small businesses, were included.
- **Infrastructure Bill** – We estimate over \$156 million for airports, ferry terminals, national parks, as well as roads, bridges, and tunnels for fire protection.
- **Omnibus Bill** – This is the bill that just passed to provide resources for Ukraine, but also included over \$5 billion for public housing, specifically \$75 million for emergency capital needs (yes fire sprinklers), and \$65 million for “competitive grants to public housing agencies to evaluate and reduce residential health hazards, including lead-based paints, carbon monoxide, mold, radon, and fire safety.”

Yes, because of NFSA and our partners on Capitol Hill, all these things are possible. Our efforts have ensured that lawmakers now know who represents fire sprinklers. I can't express how amazing it has been to watch our years of effort come to fruition.

All this transitions us back to our Buy NFSA campaign. NFSA has been working with the U.S. Chamber of Commerce for three years. We were not able to join due to the pandemic, but we are in the process of completing our application requirements now. We want to learn from the Chamber of Commerce and how they market/promote their members. We want to raise the level that we promote our members, we truly seek the next level and know that the benefit is that of a win-win and mutually beneficial to all.

As we watch this war in Ukraine, and as we've lived through COVID, it's more important than ever to Buy NFSA. We have been committed to our members for over 117 years. We have bought into our members and supported our

continued on page 8

THE TRUSTED SOURCE FOR ANY FIRE PUMP APPLICATION



NFPA-13D Home Hydrant®

The most complete and compact residential fire pump system on the market.

13-ULV-R 13R / NFPA-20 Packaged Fire Pump System

- 230 Volt, Single-Phase Electric Motor/ Controller
- UL/FM Listed Fire Pump
- Hand-built and tested by expert craftsmen
- Measures 33"d x 78"h x 32"w



NFPA-20 Diesel Packaged Fire Pump System

Reliable. Innovative. Experienced.



THOROUGHLY TESTED, SHIPS COMPLETELY ASSEMBLED, READY TO INSTALL



www.talcofire.com



Talco Fire Systems 6040 NE 112th Ave. Portland, OR 97220
503-688-1231 • 800-878-8055

SCAN ME Cut Sheets /
Submittal info available

Family

On March 4th at our onsite meeting in Los Angeles, I was elected by the NFSA Board of Directors as your new Chairman of the Board.

I am honored to serve our outstanding industry in this new role, and humbled by all the strong leaders who have preceded me over the length of my career. I recall names like Jack Ryan, Mike Friedman, Bill Oliver, Claude Chafin, Frank and Kevin Fee, Aus Marburger, Wayne Gey, Greg Huennekens, Larry Thau, and most recently, Kent Mezaros. When you add the name of my late father, Richard Boulanger who chaired from 1985 to 1987, I have some big shoes to try to fill.

To the entire Board of Directors, thank you again for the opportunity to serve. I look forward to the challenge.

Sprinkler Family is a mantra I have heard for over 40 years of my career. Now, as an elder statesman in our industry, and your newly elected Chairman of the Board, I am really living it.

Truthfully, the term is not new to me. I have heard "*Sprinkler Family*" for 60-plus years as the second-generation son of a fire sprinkler contractor. In our own business, we are actively investing in our third generation, while being aware the fourth generation might be only a few years away. By the way, my grandchildren have all learned to look up whenever they enter a building. Each one of them can show you where the fire sprinkler is. I wonder where that skill set came from? Please do not try to tell me your children or their children do not do the same thing. It's a family trait!

Our family is just a very small part of a greater group we call the Fire Sprinkler Family. If you are reading this, you are a member of that family. I'm just saying; non-family members do not sit down and read *National Fire Sprinkler Magazine!*

Whether you are a supplier of components, the manufacturer of pipe, the creator of sprinkler heads, or the contractor doing the installation, testing and maintenance, we are all the Sprinkler Family.

When you think of all the good our industry has done over the last 100-plus years and the millions and millions of square feet we have protected from the ravages of fire, it is no wonder we all love what we do and feel part of a family.

The challenges our industry has faced the last couple of years, although trying and painful, are nothing new. Our industry has survived two world wars, massive inflation runs, civil unrest, gasoline rationing, material shortages, Y2k, and now a pandemic. I can assure you in the years ahead, there will be tough times with lots of hurdles... there always are. Fortunately, our industry is just as tough and determined as ever and will continue to succeed. Our products are the solution to the fire problem, not only in this country, but across the globe. We need to continue to believe strongly in that position and resist those that say otherwise. We need to maintain our campaigns to educate the public as well as government leaders and fire officials.

The future is very bright for our sprinkler industry. I am proud to be representing it as your chair. I promise we will not go backwards, only forward. Our President, Shane Ray, believes strongly in our mission and is committed two hundred percent to our success. It makes it very easy for me to assist him in steering the NFSA ship.

As our past Chairman, Kent Mezaros, said at our last meeting, while handing me a football with his and former Chairman Larry Thau's signatures on it, "Boulanger, don't drop the Ball!" I promise all of you sports fans and Sprinkler Family Members, that is not going to happen!

All my best and thanks for your continued support!

—Jim



"Fortunately, our industry is just as tough and determined as ever and will continue to succeed. Our products are the solution to the fire problem, not only in this country, but across the globe."

From the President's Desk

Shane Ray

continued from page 5

members on a daily basis. We are working hard to get more people, industries, and trades to buy into the fire sprinkler concept.

We, as an industry, are vital to saving lives, protecting property, preserving our history, and protecting the environment. We have even found a way to raise awareness about the supply chain and all the issues that exist because of the demands and stress on this system.

Whether it's single-family homes, public housing in Philadelphia, a high-rise in the Bronx, 1,000 homes in Colorado that burn in a wildfire, or a 1.2 million square foot distribution center in Indiana, we can make a difference in all.

There is one thing that is a constant; when the fires occur, NFSA is always engaged in helping to create the "teachable moment." We also work to highlight the ways our members are part of the solution.

As your President, I hope you enjoy reading through this edition of **National Fire Sprinkler Magazine**. Always know that *Buy NFSA* is much more than a slogan, and I hope that you use this guide to help you build an effective team for ensuring fire and life safety.

A grateful,



Shane Ray, President

HYDROTEST WITHOUT REMOVING THE PRESSURE RELIEF VALVE



M7000L • M7200L

The AGF Pressure Relief Valve Model 7000L and 7200L are designed to relieve excess system pressure caused by surges or temperature changes. Both the Model 7000L and 7200L can be temporarily locked closed so they do not have to be removed from the system during hydrostatic testing. The 7000L includes a 1/2" MIPT inlet and FIPT outlet, and the 7200L includes a 3/4" MIPT inlet and FIPT outlet. Both valves are UL Listed, FM Approved, and factory set at 175 PSI (the Model 7000L is also available in 200, 225 and 300 PSI).



www.agfmfg.com

7 Cs of Effective Business Communication

The corporate world has its own infrastructure, ethics, language and way of doing things. Communication plays a vital role in the corporate world as it is something that can either seal the deal or cancel it. Effective communication allows you to put your message, thoughts, and ideas across in the right way, such that it garners attention. To deliver effective communication, there are seven vital concepts. These include:

1. Correctness

Correctness refers to supplying the right facts, using the right level of language, and conveying the right message to the audience/readers. It refers to avoiding grammatical errors both in written and verbal communication as incorrect grammar can totally alter the meaning of the sentence and entail a negative impression.

2. Clarity

Clarity entails using such language so that the recipient can easily grasp the real meaning of the sentence. The writer or speaker needs to emphasize a particular message at a point of time. If there is clarity in thoughts and ideas, then that allows the meaning of the sentence to be conveyed easily.

3. Completeness

If the writer or speaker wants to get the kind of response that he/she is expecting, then they should always supply all the necessary details. The writer or speaker must consider the state of mind of the receiver and answer all the queries raised by supporting the responses with facts and figures.

4. Conciseness

In the corporate world, nobody has time for wordy communication. So, it is better to be concise in communication and save yours and well as others' time. You can achieve conciseness by avoiding repetition of thoughts and verbose expressions. Rather, you should use brief sentences that are to the point but complete the communication.

5. Consideration

This is the most important component of effective communication that implies on thinking from the receiver's perspective. The writer or speaker should consider the view, background, education level, mindset, desires, and the problems of the audience while composing a message. You need to alter your message to meet the recipient's needs.

6. Concreteness

Concreteness in message refers to being definitive and clear rather than being general, fuzzy, and vague. The presenter should present correct and specific facts in front of the decoder for effective communication.

7. Courtesy

Courtesy is the core component of every effective communication. The start and end of a communication should be with courtesy. It refers to valuing the feelings of the receiver as that builds goodwill. The writer or speaker should use polite words and show respect to the recipient for effective communication.

The task of a manager or an entrepreneur requires constant networking and communications with subordinates, superiors, and clients, so communication plays an important part in their professional journey.

Article Source: https://EzineArticles.com/expert/Jitendra_D/2410056

Viking's Innovative VXR Dry Valve



Trusted technology. Smart design.

The Viking Model VXR dry valve is a lighter valve with a smaller footprint. Resetting and installation are a breeze with the VXR — an externally resettable, latching differential valve!

- Convenient reset located on the bottom of the valve body!
- Available with GxG outlets in sizes 2-1/2" to 6".
- Designed to operate a water motor alarm and/or an electric pressure alarm switch!
- Available in a variety of trim options, including pre-trimmed with control valve, switches and coupling all installed!



Valve and System Configurator

Configure your complete system riser for any wet, dry, deluge or preaction system right from your phone! Check out our Valve and System Configurator by scanning the QR code or visiting <https://webtools.vikingcorp.com/valveconfig/>

Fires in Waste Management and Recycling Facilities Caused by Lithium-Ion Batteries

By Jeff Dunkel, PE, [Fire Protection Engineer](#)



In the May-June 2021 edition of *National Fire Sprinkler Magazine*, I discussed the sprinkler application for Lithium Ion Based Energy Storage Systems. This is not the only application for this technology, and certainly not the only application in which these batteries pose a fire hazard. Li-ion batteries provide a considerable amount of power in a small light weight package at a relatively low

cost. As the amount of power in these small packages (also known as energy density) increases, so does the severity of fire if a failure occurs. It is safe to say most, if not all of us use devices containing Li-Ion batteries, they can be found in electronics such as cell phones, laptops, tablets, handheld gaming devices, hearing aids, hoverboards, E-cigarettes and many other devices. Since the previous article discussed the failure mechanisms and the definition of thermal runaway, this article will focus on the impacts of those failures, especially when improperly disposed.

Identifying the problem

As mentioned, the use of Li-Ion batteries is widespread and has been for some time. These batteries do not have endless lifespans. This, of course, creates waste. In July 2021 the Environmental Protection Agency (EPA) released a study titled *An Analysis of Lithium-ion Battery Fires in Waste Management and Recycling*. This report explored the growing number of fires caused by lithium-ion batteries in the waste management process. This report details 245 fires in 64 waste facilities between 2013 and 2020 that were caused, or likely caused, by lithium metal or lithium-ion batteries. The report does not capture all fires caused by improperly discarded batteries because not all incidents are made public and not all incidents are covered by the news. Due to these limitations, they believe that the incidents they identify in the report represent the cases that were relatively easy to find and that there are likely to be a significant number of additional relevant cases. The figure labeled *Fires and Facilities Affected by year* illustrates the increase of fire incidents described in the EPA report between 2013 and 2020.

Why is this a problem?

Li-Ion Batteries are considered hazardous waste when disposed and are regulated under federal and state waste rules. Under the

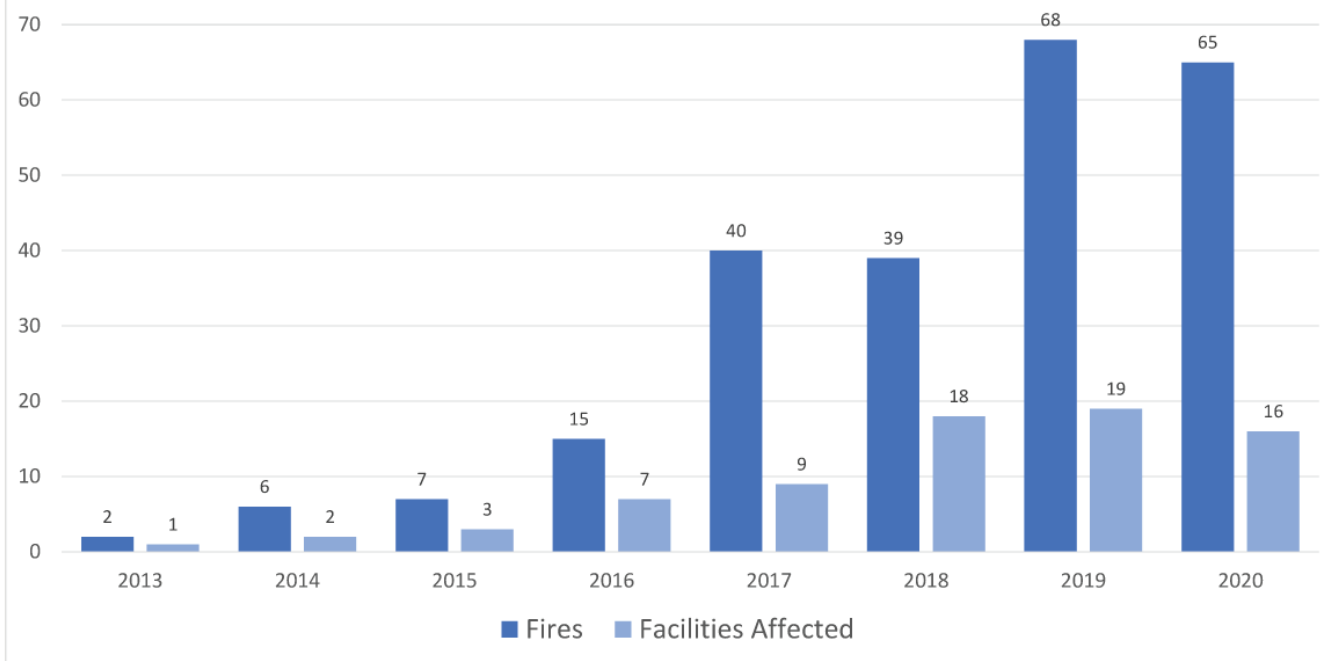


Resource Conservation and Recovery Act (RCRA) the disposal of Li-ion batteries must be managed to ensure they are safely disposed or recycled through the provisions of 40 CFR Part 273; however, this does not regulate household hazardous waste. Because it is incumbent on consumers to dispose of old batteries or electronics that contain batteries found in the household, it is inevitable that Li-ion batteries will be found in the municipal waste process even though retail facilities provide free battery recycling collection programs.

One mode of failure that could cause a Li-ion battery to fail is mechanical damage, which is likely to happen in the standard waste process. When this failure happens, the combustible waste surrounding this ignition source lends itself to a significant fire. While it is unknown how many waste management facilities are properly protected with fire sprinklers, it is often the case that waste facilities are exempt from local and state building code requirements. The number of losses reported are increasing, which could be a sign that the level of protection provided may not be adequate. History may have shown that the level of protection provided for these facilities in the past was adequate, but the increasing number of fires certainly suggests that a reevaluation of these facilities' suppression and detection systems is warranted. Though these facilities have strict policies not to accept Li-Ion batteries, there is currently no process to ensure they do not enter

continued on page 12

Fires and Facilities Affected by year



continued from page 11

the waste flow other than policies and operators recognizing these batteries as they enter the facility. With the increase of battery use, the likelihood and frequency they will improperly enter the common waste flow will also increase.

How should Waste Management Facilities be Protected?

Each waste management facility is different. They may receive different materials because recycling of household waste is based on their policies. They may also accept only specific materials. Along with different materials, the processes may be different from facility to facility. For this reason, it is imperative that each facility be evaluated by a competent design professional to develop a fire protection plan. This plan would include fixed suppression systems, detection systems, and portable fire extinguishers based on the materials and processes in that facility.

Based on the risk, it is likely that any hazard analysis would determine that a fire sprinkler system would be required for any indoor waste management facility. But what does the building code say? Again, while each facility is different, a waste management facility receiving typical recyclables (paper and plastics) would meet the definition of a moderate-hazard factory industrial occupancy or an F-1 Occupancy. These are defined as occupancies that include, among others, the use of a building for assembling, fabricating, finishing, manufacturing, packaging, repair or processing operations that are not classified as a Group H hazardous or Group S storage occupancy. Section 903.2.4 of the IBC requires sprinklers for Group F-1 occupancies with fire areas exceeding 12,000 square feet.

NFPA 13 does not provide specific criteria for waste management facilities. Large piles of materials make these facilities susceptible to

deep-seated and shielded fires that are hard to detect and may be difficult to extinguish. It is impossible to dictate a design density for all facilities. Any analysis conducted must include a detailed review of the anticipated materials or combination of materials brought into the facility and the pile size anticipated in the specific process to evaluate the proper design criteria. Any densities lower than Ordinary Hazard Group 2 (0.2 gpm/sqft over 1,500 sqft) would most likely be inadequate. Even though the ignition source may be the Li-ion batteries, the design criteria should also be based on the bulk material of the facility and not just the batteries.

Of course, for this unique hazard, sprinklers are only part of the complete fire protection scheme. Due to the potential for deep-seated fires, hose stations would also be a prudent addition though they are not directly required by the IBC. Due to the common occurrence of fires at these facilities personnel are often trained and well versed in emergency procedures for a fire incident. With that being the case, a Class II standpipe may be a good choice. It must be communicated with the owner in advance to ensure they know the requirements for training the employees to properly fight a fire with this equipment and that the risk is acceptable.

There are additional types of suppression systems, some of which are marketed specifically for this application, such as remotely-controlled foam monitor stations coupled with video heat detection. These systems may be a good option; however, they should be used in addition to, not as a replacement of, fire sprinkler systems designed per NFPA standards. •

SOURCES:

Lett, Kathy, et al. "An Analysis of Lithium-Ion Battery Fires in Waste Management and Recycling." *EPA*, Environmental Protection Agency, 2021, <https://www.epa.gov/recycle/importance-sending-consumers-used-lithium-ion-batteries-electronic-recyclers-or-hazardous>.

Codes for Phased Retrofit Installation

by Jeffrey M. Hugo, CBO, Vice President of Codes and Public Fire Protection



The 1970s triggered a boom for the fire sprinkler industry. At this time in history, the model codes started to include requirements for the mandatory installation of automatic fire sprinklers or the option to install sprinklers to trade off other fire protection material in new construction. Today, over 50 years later, the 2021 editions of fire and life safety codes, such as NFPA 1, *Fire Code*, the *International Fire Code* (IFC), and NFPA 101, *Life Safety Code* are all widely adopted across the U.S. They have gradually increased the requirements to retrofit automatic sprinkler systems in existing buildings, such as for high-rise occupancies, institutional, and assembly occupancies.

Scope

Building owners manage properties by locally adopted codes and ordinances. Much of what has been developed in the model codes referenced above, aside from the mandatory installation, are qualifications, remediation, milestones, and coordination with the Authority Having Jurisdiction (AHJ) and building owner. Local ordinances can, and often do, modify, or completely remove model code text (regardless of the technical committee membership support). It is very important for contractors and designers to have knowledge of the model codes and any local amended changes made to those ordinances. There are four steps to the retrofit process:

1. Initiation through adoption of a fire code.
2. Development of the compliance plan.
3. Establishing the timeline.
4. Compliance through completion

1. How codes initiate retrofit

Each model fire and life safety code have a slightly different scope and are developed by different technical committees and influences. This can mean that all three will have some similarities and some differences when adopted locally. In general, with the adoption of the code, the owner has approximately one year to get a plan to together as detailed below. The trigger that initiates the retrofitting of an existing building first starts with the AHJ and a registered letter to the owner:

- NFPA 1 – High-rise buildings: Section 13.3.2.25.2 notifies the building owner/manager of the retrofit rule (adoption of

the code) within 180 days. Building owners/representative have another 180 days to develop a “plan of action to comply”.

- NFPA 1 – Other existing buildings: NFPA 1 addresses existing buildings by extracting from NFPA 101. See NFPA 101 below
- NFPA 101 – All existing buildings: While NFPA 101 requires existing buildings to comply upon adoption of NFPA 101, Section 4.6.6 provides performance language for reasonable time to comply.
- IFC – High-rise buildings: Section 1101.4 notifies the building owner/manager.
 - Through specific adoption of Appendix M, the owner files compliance plans within 365 days of the 1101.4 notification.
 - Where Appendix M is not adopted, Section 1103.5.4 #3 requires a compliance schedule within 365 days.
- IFC – Other existing buildings: Section 1101.4 notifies the building owner/manager through performance language for compliance plan and schedule as approved by the AHJ.

2. Compliance plans

Once the initial notices are acknowledged, the building owner has the responsibility to develop the compliance plan and delivered it to the AHJ by the deadline. This is where the owner gets designers and fire sprinkler contractors involved to set the sequencing for completion. While each code is focused on an end date, they

continued on page 15



SNAPDRILL

"say good-bye to broken wrists, pilot bits and off-center outlets"



Say hello to *Snapdrill*:

The only **hand-held and automatic** pipe hole cutting system. **Guaranteed faster and safer.**

Always in center. No burr. Button push.

More than **60 companies** in our home country, Norway, have experienced what the fitters call a **revolution in fire sprinkler installation.**

Western States Fire Protection and *JF Ahern* are among the US pioneers. Reporting that the tool **pays for itself on the first job.**

Want to join the revolution?

Martin Talgø, Manager
martin@snapdrill.no
+47 950 58 125



6x faster



100 % safer



25x longer tool life

continued from page 13

recognize the complexity and hardships of retrofitting existing occupied buildings. NFPA 1, Section A.13.3.2.25.2 provides the best guidance for items to consider when developing the compliance plans. The plan should be developed with the following in mind:

- The availability of qualified contractors to install standpipe and sprinkler systems.
- The impact on owners, managers, and tenants as a result of existing conditions contained in lease agreements.
- Environmental and health issues to residents caused by construction disturbances, such as dust, asbestos, and lead paint.
- The availability and interruption of residents and occupants for installation.
- Owner funding and release of payments.
- Other systems and processes affected or triggered by the fire sprinkler retrofit, such as fire alarm upgrades, standpipes extensions, fire pump rooms, and general remodel.

The IFC requires, through Section 1101.4.1, the construction plans and time schedule to be approved by the AHJ.

3. Retrofit and schedule timeline

In the more recent editions of the codes, progress on the retrofit installation becomes part of the project management in the compliance plan. No more is a multi-year deadline just a date on a calendar several years down the road. Some codes, like the NFPA, suggest milestones to be met during the process. The AHJ, contractor, and owner has a duty to make incremental installation of the fire protection system adhere to a schedule so every stakeholder can count on one another. The IFC has not implemented or mandated any specifics to be met along the path of retrofit, but it does not prohibit such language or goals to be part of the construction plans. Highlights in each code are as follows:

- NFPA 1 – High-rise buildings: Section A.13.3.2.25.2.3 suggests scenarios such as:
 - Plan submitted and approved within 1 year; 33 percent of area completed within 4 years; 66 percent of area completed within 8 years; 100 percent of area completed within 12 years.
 - Plans submitted and approved with 1 year; all common areas completed within 4 years; 50 percent of remaining area completed within 8 years; 100 percent of remaining area completed within 12 years.
 - Alternative schedules can be approved by the AHJ.
- NFPA 1 – Existing buildings: NFPA 1 addresses existing buildings by extracting from NFPA 101.
- NFPA 101 – All existing buildings: Section 4.6.6 and A.4.6.6 provides performance language for reasonable time to comply.
- IFC – All existing buildings: Section 1101.4.1 as documented in the schedule and approved by the AHJ.



4. Completion deadline

Historically, the completion deadline to retrofit any building is 12 years. Some projects, such as a standalone nightclub, do not need this amount of time. The codes give the AHJ and owner some flexibility to determine the deadline needs based on finances, water supply, contractor availability and more. Completion does equal compliance with the locally adopted code and increases the sprinklered benefits to the owner, occupants, and community. Recent editions of codes closed a loophole where a newer edition adoption would restart the clock, giving owners more time. Granting more time is not unreasonable when projects are underway, but when the delaying motive is to intentionally circumvent progress, it is contrary to the scope of fire protection. Below are some quick points regarding completion deadlines:

- NFPA 1 – High-rise buildings: Section 13.2.25.2.3 requires completion within 12-years
- NFPA 1 – Other existing buildings: NFPA 1 addresses existing buildings by extracting from NFPA 101.
 - Existing health care: Section 12.3.2.11.2 requires in 12-years, but this section prorates the deadline dependent on the previous adoption of a specific edition year. Where previous editions of NFPA 1 were adopted, the clock adjusts:
 - 2018 edition adopted – 9 years to complete
 - 2015 edition adopted – 6 years to complete
 - 2012 edition adopted – 3 years to complete
- NFPA 101 – Existing high-rise buildings:
 - Assembly: Section 13.4.5 – no deadline
 - Education: Section 15.4.3 – no deadline
 - Day-care: Section 17.4.3 – no deadline
 - Health care: Section 19.4.3.4 – 12 years (correlated with same clock of edition noted in NFPA 1 above)
 - Ambulatory health care: Section 21.4.3.1.2 – 12-years
 - Detention: Section 23.4.4 – no deadline
 - Hotels and dormitories: Section 29.3.5.1 – no deadline
 - Apartment: Section 31.3.5.9.1 – January 1, 2033

continued on page 16

continued from page 15

- Residential board and care: Section 33.3.3.5.3 – no deadline
- Industrial: Section 40.4.2.3 – 12-years
- Business: Section 39.4.2.1 – no deadline
- NFPA 101 – All existing buildings: no deadlines are required for retrofit systems.
- IFC – High-rise buildings: Section 1101.4 notifies the building owner/manager.
 - Through specific adoption of Appendix M, requires completion in 12-years.
 - Where Appendix M is not adopted, Section 1103.5.4 #3 requires completion in 12-years.
- IFC – Other existing buildings: Section 1101.4.2 as documented in the schedule and approved by the AHJ.

Installation

All model fire- and life-safety codes require the installation and retrofitting of automatic sprinkler systems per NFPA 13. The extent of the system installation within the building often differs. Some jurisdictions, through ordinances or codes, such as NFPA 101, permit partial systems coupled with fire alarms and other fire protection systems. These systems are better known as Engineered Life Safety Systems or ELSS. The idea of ELSS has merit, but

it lacks the full confidence and equivalency of life safety to the occupants. Permanent, partially installed, standalone systems or “Dorothy Mae” systems have an unsatisfactory result and unreliable record because sprinklers are only installed in the public areas, leaving the occupied dwelling unit unsprinklered and occupants unprotected. Furthermore, these systems are not sized to accommodate future extensions, resulting in higher costs to owners when or if they decide to complete the installation.

A better application of retrofitting sprinklers in existing buildings is phased installation. Phased installation sequences the full system in time. That means it may start out as a partial system, such as sprinklers in the public areas, and as tenants and occupants move out, change use, or at a future deadline, the tenant areas are finished, the result will be a fully protected building in compliance with NFPA 13. Another important benefit of a fully retrofitted building is the application of using legacy tradeoffs, such as reducing corridor fire resistance, to help offset installation and building maintenance costs.

For more information on retrofitting existing buildings, see the NFSA’s Fire Sprinkler Retrofit Guide available free in the NFSA store. •



The REPAIR PARTS Experts

- Fire Pumps
- Backflow Preventers
- Automatic Control Valves

- ✓ Fast Quotes
- ✓ Largest Inventory in the Nation
- ✓ 1 - 2 Day Delivery



American Backflow
Products Company

CONTACT US

(800) 575-9618

www.backflowparts.com

FLOW SMARTER, NOT HARDER.

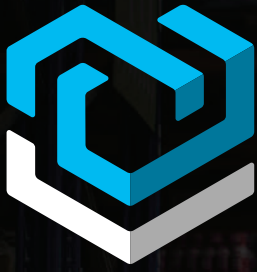
The era of manual conversions, data input and human error is coming to an end with SmartMonster™, the digital breakthrough in flow testing the industry deserves. Gather your test's readings from anywhere and organize the results in the cloud for safekeeping, all from the ease of your own device.



*App screen
subject to change.

READY FOR THE FUTURE OF FLOW TESTING?
SIGN UP TO BE A BETA TESTER TODAY.

HOSEMONSTER.COM



ASCTM
Engineered Solutions



Quality products are just the beginning with **ASC Engineered Solutions**

Anvil & Smith Cooper:
One company. One focus. Your success.

A solution is much more than precision-engineered valves, sprinkler drops and supports: it is an answer to a challenge. That's why we chose ASC Engineered Solutions as our new name — because we work hard to solve the problems you face every day.

Being a solutions provider means paying as much attention to how we serve you as we do to the products from our leading brands, including FlexHead® and FPPI®. It's about accountability — standing behind our solutions and always doing what's right — and excellence in customer service. That's what it takes to be a partner you can depend on to come through for you every time.



www.asc-es.com



Building connections that last™

A Buyer's Guide to: Learning & Development

by Dani Francis, **Event Coordinator**



Everyone has different needs when it comes to Continuing Education. Whether striving to learn something new, or in need of a refresher, the NFSA's Learning & Development Team has a variety of opportunities that can fit your needs. From a one-hour, self-paced course for yourself, or an in-person, three-day, private class for your organization, or anywhere in between, you can use the Learning & Development webpage, community.nfsa.org/learning, to find the right course.

Self-paced (On-demand)

For self-paced (or on-demand) courses, you can shop our eLearning catalog. Courses are available on a variety of topics and cater to various experience levels. Many of our eLearning courses are available for individual purchase. We have also bundled some courses that relate to a similar topic, to give you a more comprehensive learning experience. These bundles can be particularly helpful for those who are not quite ready to navigate all learning opportunities by themselves or are looking to focus on one topic. It is important to know that NFSA members get 50% off the price of all eLearning courses.

Live, Virtual

Live, virtual classes presented in real-time, with an instructor live-streaming content. Unlike eLearning classes, which you purchase through the NFSA's online store, live, virtual classes are registered for, like meetings or events. Tech Tuesdays occur the third Tuesday of every month at 12:30 pm ET. These webinars are \$50.00 for non-members and free for members! New in 2022 is our Learning Branches series. These are similar one-hour live technical webinars that take place at a variety of times and days of the week. So, while an early Wednesday morning Learning Branch at the beginning of the month might not work for you, perhaps the late Monday afternoon Learning Branch later in the month will! Learning Branches are \$30.00 for non-members and just \$15.00 for members! Any engaging virtual classes can be found in the Upcoming Classes list or Learning & Development calendar on the Learning & Development webpage.

In-person

In-person classes occur all over the United States, from Seattle, to Texas, and, most frequently, in Baltimore, Maryland at NFSA

headquarters. These classes are often one to three 8-hour days in length. Learning & Development offers in-person courses geared towards all different kinds of professionals who work in and around fire sprinklers – designers, fitters, contractors, inspectors, AHJs (Authorities Having Jurisdiction), and more! To see a full list of the NFSA's in-person classes, check out the course catalog online. The Learning & Development calendar on our website lists all upcoming in-person courses open to the public. While the cost varies depending on the class, one thing is for sure – members get 50% off the price! If there is a course you are interested in that you do not see coming up on the calendar, reach out to the Learning & Development Department (learning@nfsa.org) - your organization could co-sponsor the course for folks in your area.

Contract

The final type of learning opportunity the NFSA offers is private, contract classes. If you are interested in your entire team having private instruction, that opportunity is available to you and your team! Any of the classes available for live instruction, as listed in the course catalog, are available for a contract class. Contract classes allow for more personalized learning from an expert NFSA instructor. Depending on the course material, the instructor could take some time to answer questions specific to your organization's needs, which may be difficult to cover in classes open to the public. In most circumstances, contract classes can take place in the location of your choosing, be it your own facility, a rented space, or NFSA Headquarters. Private classes can also be a great team building experience for your business. Going through the class together, working on group projects, and sharing experiences through class discussion can be a chance for your team to develop together, making a more cohesive workforce. If you are interested in contract classes, first read through the NFSA Course Catalog to gain a better understanding of what courses are available for your team. Then, reach out to the Learning & Development Team to discuss setting up your very own contract class!

We're Flexible

There are many ways to take advantage of all of the opportunities the NFSA's Learning & Development Team can offer you. The NFSA is always evolving its educational strategy to help you and your team learn, grow, and develop the skills to succeed in your career. •



COMPRESSED AIR



DRY AIR



NITROGEN



ACCESSORIES



13D PUMP & TANKS

OL Advance Series

FIRE PROTECTION AIR COMPRESSORS WITH DIGITAL PRESSURE SWITCH



Introducing the most advanced Fire Protection Air Compressors ever built! Featuring an all-new, Patented, General Air Products Digital Pressure Switch, and an Automatic Drain Valve on Tank Mounted models.

The ONLY UL-Listed Digital Pressure Switch in the Fire Protection Industry designed and manufactured by the compressor manufacturer themselves. Displays Pressure Readings, Run Hours, Amps, Cycles and is extremely easy to adjust pressure settings in the field with the push of a button.



For Product Info visit generalairproducts.com

For Training Opportunities visit training.generalairproducts.com

For Technical Assistance call **800.345.8207**

NEW MEMBERS

CONTRACTOR

Leonard Perretti

Alliance Fire Systems, Inc.
Mars, PA

Carlos Milo

Ardor Fire
Clayton, MO

Michael Rogers

Atlantic Fire Sprinkler Inc.
Bennington, VT

Pete McHugh

Ayoob & Peery Plumbing
Company Inc.
San Francisco, CA

John Drysdale

Beacon Fire Protection
Weymouth, MA

Brian Marinus

Big Red Fire Protection
Omaha, NE

Ralph Diaz

Black Hawk Fire Suppression,
LLC
Newburgh, NY

Ryan Cole

Blackstone Fire Protection, LLC.
Washougal, WA

Jeff Kennelly

Border Fire Protection, Inc.
Maumee, OH

Shane Leatherman

CFP International, LLC
Hagerstown, MD

John Coleman

Coleman Fire Protection
Melbourne, FL

Lou DeAngelo

DeAngelo Fire Protection, LLC
Forked River, NJ

Fire Protection Specialists, Inc.

Columbus, OH

First Defense Fire Protection

Snohomish, WA

Dustin Kuehne

Frontier Fire Protection
Carmichael, CA

John Joyce, Jr.

Geo. M. Robinson & Co.
San Jose, CA

Jesse Evans

Grizzly Fire Protection, LLC
Somerset, PA

Chris Geiger

Guardian Fire Systems, Inc.
Spencer, IN

Mark Haney

Haney Fire Protection
Port Murray, NJ

David B

Helios Fire Protection, LLC
Cottondale, FL

John Lopez

Intra Works, Inc.
Albuquerque, NM

Jennifer Kelly

Kelly Fire Protection
Huntington Beach, CA

Johnny Martinez

Martinez Fire Protection
Arvada, CO

Zounee Yang

McKinley Fire Protection LLC
Anchorage, AK

George McNeill

Meridian Fire & Security
Centennial, CO

Brian Geary

MK Fire Protection & Supply, LLC
Blackwood, NJ

Kyle Myers

Myers Automatic Fire Protection
Goddard, KS

Todd Brania

Orion Fire Protection
Wauconda, IL

Manuel Perrone

Perrone Fire Protection
Tampa, FL

Edward Cardenas

Platinum Sprinkler Company,
LLC
Pearland, TX

Pamela Railsback

Railsback Pump and Control
Services, Inc.
Southwest Ranches, FL

Jeff Curtis

Reliant Fire Protection, LLC
Arlington, TX

Sal Alonge

S & L Plumbing and Heating
Armonk, NY

Ken McGraw

Seamless Fire Protection
Copperopolis, CA

Greg McElroy

Shamrock Fire Protection
Carol Stream, IL

Eric Streb

Streb Fire Protection
Springfield, IL

Stefan Buitron

Superior Automatic Sprinkler
Corporation
Bel Air, MD

Tim Tiger

Tim Tiger Enterprises, LLC
Sparta, NJ

Anthony Veneziano

Veneziano's Fire Protection
Maintenance, LLC.
Cinnaminson, NJ

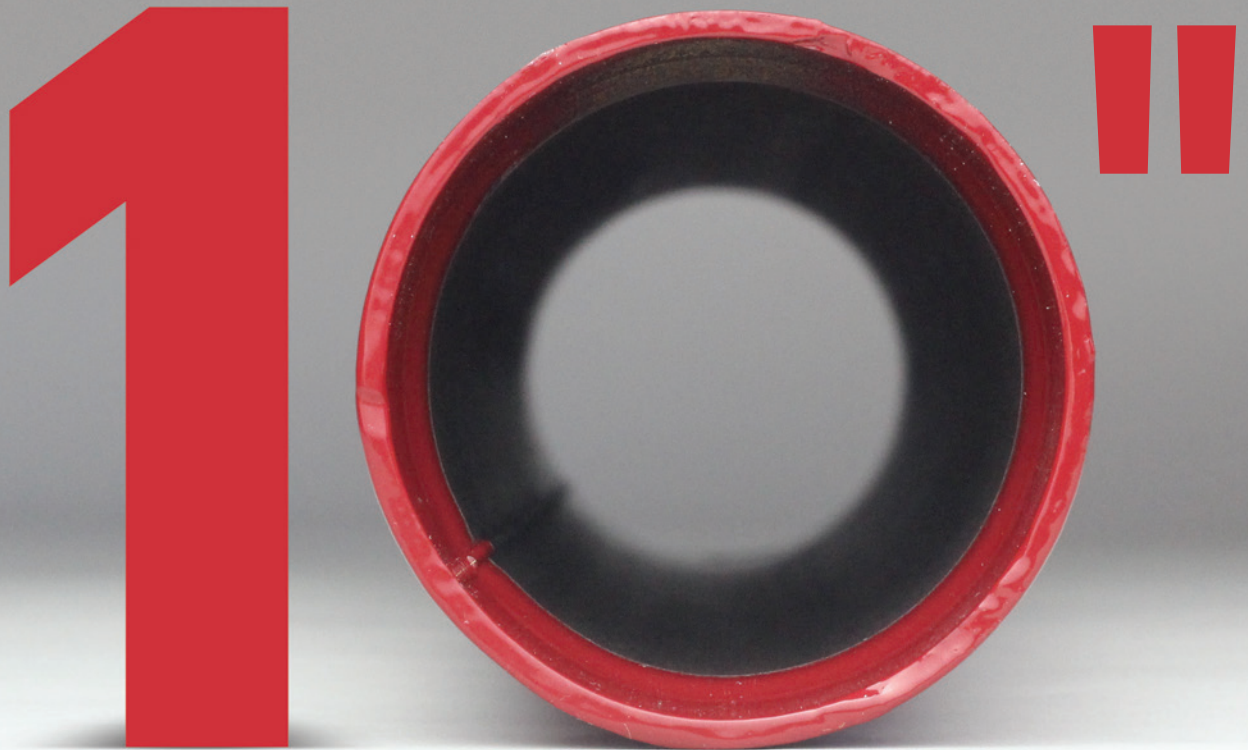
William Kimmen

Veteran Fire Services, Inc.
Fort Pierce, FL

SAM

Damon Pietraz

Underwood Fire Equipment
Wixom, MI



COMING SOON

from our new Texas facility:

5" to 10" Schedule 10/30/40!

Our new plant in Sinton, Texas, will soon be in operation, producing sprinkler pipe up to 10" diameter.

The new mill will expand our overall product capabilities, giving us the most comprehensive range of sprinkler pipe in the industry:

- Diameters from 1" to 10" NPS.
- Schedule 10, 30, 40, and Eddy Flow (size dependent)
- Lengths up to 25', with custom lengths available

Plus a variety of finishing options – not to mention our exclusive EddyGuard II® MIC antimicrobial coating to help ensure reliable flow for years.

It's all available to you from a single, responsive supplier...making your pipe selection job much easier.

Plants located coast-to-coast...



for fast delivery anywhere!



BullMooseTube.com | 800.325.4467

Our Members Make the Difference!



by Vickie Pritchett, Vice President/Executive Officer

This is one of my favorite issues of *National Fire Sprinkler Magazine!* Why? Because it's our Buyer's Guide and I love it when we can recognize our members and encourage everyone to "Buy NFSA!"

Recently, at the International Builders Show, we were able to add an interactive kiosk to our booth. The kiosk was engineered and designed by Reliable Fire Sprinkler! The kiosk, had flowing water, and allowed us to draw homebuilders into the booth and explain and address common myths. Things like; "Why is only one fire sprinkler flowing in this model?" Because that is all it takes to control the fire! We had great fun with this addition to the booth, and a heartfelt thanks goes to the Fee Family and the entire Reliable team for making this dream become reality in the NFSA booth! We sure do enjoy representing the fire sprinkler industry at this international event that brings homebuilders together to learn about the latest technology and building products available. Another great example of your association living its mission, "To protect lives and property from fire through the widespread acceptance of the fire sprinkler concept." (Insert Reliable photo)



In that spirit, we were so excited to have a first of its kind opportunity presented to us when our logo traveled around Daytona International Speedway on the trunk of Christopher Bell's DeWalt #20 Joe Gibbs Racing car this year! I was given the opportunity to do a zoom interview with Christopher prior to the race, and I can't say enough good things about this young man. You can mark it down that you read it here first, he is going to be a contender and a winner in NASCAR racing!

A big thank you goes to our friends in Florida who helped make this happen and to our SAM member DeWalt.... a true example of partnering together to promote our cause! When I spoke with Christopher, he was in awe of the great work accomplished by our members, and even recorded a 30-second shoutout for our social media channels about NFSA! How cool is that? You can check out his endorsement of the work you do here:



As I listened to Christopher speak of starting out on the dirt tracks in Oklahoma, I was inspired by his humble nature, his pure zest for life, and his love of racing. We talked about how awesome it is to be on Joe Gibbs' racing team, and all the ways he is learning from some of racing's elite members. You know what, we may not drive race cars at over 200 mph, but Christopher is right when he proclaimed that we would indeed be "fastestwater on the track!"

Thanks again to everyone who was part of this amazing event, and an extra thanks to another NFSA member, MJ Wood, for the role you played in this connection as well!

On a legislative note, NFSA continues to be engaged at the state and federal level on your behalf. To always know the latest information on legislation and our advocacy efforts, visit www.nfsa.org/advocacy – we have worked hard to gather relevant information all in one place, and also provide ways for you to engage with your legislators in an efficient way.

I sure hope that you are making plans to join us in beautiful Clearwater Beach, Florida September 28-30 for our **2022 Business & Leadership Conference**. Full details will be shared soon, but you can find the latest online now at www.nfsa.org – I sure hope to see you at the beach!

Until next time, Stay safe,

Vickie



FIRE SPRINKLERS IN ACTION

Arizona

High-Rise Sprinkler Save

Thanks go to RCI Fire System's GM Aaron Bennett for alerting us to this sprinkler save!

On January 30th, about 200 residents escaped safely after a fire broke out at a high-rise apartment building in Tempe, AZ.

Upon arrival, firefighters upgraded the fire to a 3rd alarm. At one point, 250 firefighters were on the scene from six different cities. Fire officials say the fire started in a 9th-floor unit, activating the fire sprinkler system, which contained the flames to a single unit. Sometime after midnight, most residents were allowed to reenter their homes. No injuries were reported.

Florida

Single Sprinkler Extinguishes Kitchen Fire

Thanks to Advanced Fire Protections Services' VP of Construction Judd Mickler for sending in this sprinkler save!



We had a fire extinguished by one sprinkler. Some groceries were inadvertently left on the stove, and you can see the result. One sprinkler extinguished the flames and saved a lot!

Sprinklers Extinguish Apartment Kitchen Fire

Thanks to Tamarac, FL Division Chief/Fire Marshal Tommy Demopoulos for sending us this sprinkler save!

“On March 13th, sprinklers extinguished an early morning fire in an apartment building in Tamarac. This system saved the lives of the resident and her cat, other residents in the building, and reduced the exposure for our firefighters to cancer causing carcinogens.”

Delaware

Sprinkler Save at Motel 6

Thank you to the Delaware Fire Sprinkler Coalition's Paul Eichler for sending us this sprinkler save.

The Delaware Office of the State Fire Marshal is investigating a fire that damaged a hotel located in Seaford, Delaware on February 9th. The incident, reported shortly before 8:30 P.M., occurred at a Motel 6. The Seaford Volunteer Fire Department arrived on the scene and found smoke coming from a hotel room. The fire in the room had been controlled by the building's fire sprinkler system and extinguishment was completed by firefighters. The building was occupied at the time of the fire and all occupants escaped without injury.

The fire was determined to be accidental in nature and was caused by failure of a charging electrical appliance. There were no reported injuries to persons or firefighters. Damage is estimated at \$500.00.

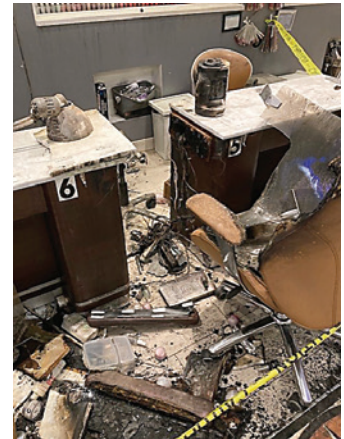
Indiana

Two Fire Sprinklers Save Nail Salon

Thanks to NFSA member Ryan Fire Protection's Kevin Ryan for sending us this sprinkler save!

A fire in a Noblesville, IN nail salon started from an overloaded electrical cord with multiple plug-ins. No one was in the salon when the fire began. Two sprinklers activated, and the fire was extinguished when the fire department arrived.

The nail salon is a tenant in a building sharing space with a restaurant. The consequences of this fire would have been much worse had the salon not been sprinklered.



Maryland

Single Sprinkler Extinguishes Kitchen Fire in Senior Apartment Complex

Thanks go to Montgomery County Maryland Fire & Rescue Services for submitting this sprinkler save.

This report may be brief, but the photo is worth 1,000 words! A toaster fire in a senior apartment complex in Gaithersburg, MD was controlled by ONE fire sprinkler prior to the fire department

continued from page 24

extinguishment. No injuries were reported. Residents, staff, and firefighters safe.



Minnesota

Sprinkler Save at Bus Garage

Thanks to Jason Albers of the Eden Prairie, MN Fire Dept. for sending us this sprinkler save.

Feb. 11th-Southwest transit bus was parked in the storage facility, no employees on site. Failure in battery compartment under bus. Initial fire burnt through floor in bus and then started interior on fire. Bus flashed and activated fire sprinklers (5 total). Initial call came in as a waterflow alarm. Upon arrival smoke was pushing out of doors and it was upgraded to a building fire. The bus of origin was the only bus lost. No damage to the structure, only failure of some lights and electronics. Each coach bus is valued at \$700,000 to \$800,000 and there were 64 parked in the building. In addition, there were 23 disability busses which are valued at \$110,000 each.

Sprinkler System Saves Lives During Apartment Fire

Thanks to Elk River, MN Fire Chief & Director of Emergency Management Mark Dickinson for sending in this report of a sprinkler save.

We had an apartment fire at 1227 School Street, this is a 3-story building and the fire was on the 3rd floor. The building is wood

frame with no fire stops and without the assistance of the sprinkler system we easily would have had significant fire spread.

The fire happened on Presidents Day and most of the units were occupied. We respond to this building often for alarms, and the residents ignore the alarms consistently which they did that day. The resident of the fire unit had her couch catch fire and she stayed to try to put the fire out. She was rescued and transported to the hospital for smoke inhalation.

If there would not have been a sprinkler system, I'm confident she would have been a casualty, and we would have had multiple residents trapped. The situation would have been a lot worse, not just for the residents but it would have put our firefighters into a much more dangerous situation.

Sprinkler System Saves Commercial Building

Thanks to South Metro, MN Fire Dept's Assistant Fire Chief Fire Marshal Terry Johnson for reporting this sprinkler save.

We had a sprinkler save at a commercial property in South St. Paul. Shortly after 1:30am on February 17th, crews were dispatched to a water flow alarm at a commercial building. Upon arrival, South Metro Engine 2 noted smoke coming from two overhead doors. They upgraded the call to a structure fire and requested additional resources. After making their way into the building, crews found a dump truck on fire which had been controlled by the sprinkler system. Additional suppression was provided by fire attack crews. The truck is a loss, but the remaining contents of the building appear to be mostly salvageable

Texas

Single Sprinkler Saves Apartment Complex

Thanks go to the Harris County, TX Fire Marshal's Office for sending us this sprinkler save.

On February 9th, a fire began in a garage at a Katy, TX apartment complex. HCESD #48 Fire Department Captain Zachary LaBonte reported that firefighters arrived to find an extinguished fire inside the garage. The fire was extinguished by a single fire sprinkler.

Captain LaBonte stated the fire was caused by improperly discarded smoking material and ruled accidental. No injuries were reported.

Three Fire Sprinklers Save Apartment Complex

Thanks to McKinney, TX Fire Dept.'s Public Information Officer Merit Ossian for sending us this sprinkler save!

The McKinney Fire Department (MFD) responded to a structure fire call at an apartment complex on February 26th. Firefighters arrived to find that three fire sprinklers had been set off by a cooking fire on the stovetop. The fire sprinklers did their job by containing

continued on page 26

Fire Sprinklers in Action

continued from page 25



and extinguishing the flames.

One occupant was transported as a precaution and damage was limited to a single apartment.

“That this fire set off three fire sprinklers shows how quickly the fire was spreading,” said Merit Ossian, Public Information Officer and Education Coordinator. “Luckily, this apartment had sprinklers, or this could have been much worse.”

NEVER FLIP AN FDC CHECK VALVE AGAIN

NEW HYDRA-TAP

Made in USA

HYDRA-TAP™
Clapper Flush Tool
Holds the clapper open and allows for Quick Forward Flow or FDC Backflush

Tap into different styles of 4" and 6" Swing Check Valves

FLANGED GROOVED WAFER

NFPA EXPO BOOTH #304

ARGCO
EXCLUSIVE

Wisconsin

Fire Sprinkler Saves Strip Mall

Thank you to Brookfield, WI FD Deputy Chief of Fire Prevention Nick Rogne for sending us this sprinkler save.

Fire crews responded to a fire alarm at a Brookfield, WI strip mall in the early morning hours on February 25th.



At approximately 2:25am, the Waukesha County 911 Communications Center received a 911 call from an alarm company reporting a fire alarm. The first arriving fire units reported the sprinkler system was activated with smoke in the building. Additional units were dispatched to the scene.

The fire was contained by the fire sprinkler system and extinguished by firefighters. The fire was limited to the checkout counter in the front of the store and smoke damage throughout the building and adjacent business. There was no structural damage to the building, and no reported injuries. The fire remains under investigation. •

900 Industries, Inc.

16 Deborah Drive
 Sutton, MA
 Tel: 508.865.9800
www.900industries.com

AB Pipe & Supply

6500 NW 37th Ave
 Miami, FL 33147
 Tel: 305.691.5000
www.abpipe.com

ACV Enviro

928 E Hazelwood Ave.
 Rahway, NJ 07065-5634
 Tel: 800.777.4557
www.acvenviro.com

Academy of Fire Sprinkler Technology

301 N Neil St Fl 4
 Champaign, IL 61820-3163
 Tel: 217.607.0325
www.sprinkleracademy.com
 Email: cecil@sprinkleracademy.com

Accu-Fire Fabrication, Inc.

8 Progress Drive
 Morrisville, PA 19067
 Tel: 215.428.2400
 Toll Free: 800.641.0005
 Fax: 215.428.0355
www.Accu-Fire.com

Founded:

1991

Primary Products/Services:

Fire Sprinkler Fabrication & Supply

Market Area:

Northeastern US

Hours:

7:00 am - 5:00 pm M-F

Management:

Deandra Murphy, President
 Vince Murphy Sr., Vice President
 Vince Murphy Jr., General Manager
 Dan Boice, Sales Manager

Mike Murphy, Regional Sales Manager
 Neil Gregoire, Capital Region Sales Director
 Travis Granger, Inside Sales
 Inga Wright, Accounts Payable

Sales Contact:

Michael Murphy, Regional Sales Manager
 Tel: 215.858.2508
 Email: Sales@Accu-Fire.com

Company Profile:

Since its inception in 1991, Accu-Fire remains a family owned and operated business. We are dedicated in providing superior fabrication and unparalleled service to our customers. Our 90,000 sq. ft. fabrication facility has over ten acres of pipe inventory. In late 2018, we finished an adjacent 45,000 sq. ft. storage facility to house our loose inventory. All products are delivered on our company trucks equipped with either a 65-foot knuckle boom crane or rear mounted forklift. In addition to fabrication, Accu-Fire is a full-service supplier of fire sprinkler devices. Accu-Fire is an approved Women's Business Enterprise.



Aegis Technologies, Inc.

319 Circle of Progress Dr
 Pottstown, PA 19464-3811
 Tel: 610.676.0300
 Fax: 610.676.0383
www.aegistechnologiesinc.com

Founded:

2007

Primary Products/Services:

Adjustable Drop Nipples, Non-adjustable Drop Nipples, Welding Outlet Fittings

Market Area:

North America, Europe

Hours:

8:00 am - 4:00 pm

Management:

Erik T. Jensen – President
 Email: ejensen@aegistechnologiesinc.com
 Theodore R. Jensen - Exec Vice President
 Terry F. Clark - VP of Sales
 Michael D. Ketterer - VP of Engineering

Sales Contact:

Terry Clark, V.P. Sales
 Email: tclark@aegistechnologiesinc.com

Company Profile:

Aegis Technologies, Inc. is a domestic specialty fittings manufacturer that has the know-how, experience, and determination to provide your

fitters with high quality fittings at a value that will help you continue to realize material and labor savings. The Aegis product offering consist of the Adjuster adjustable sprinkler drop, the Dropster non-adjustable sprinkler drop and Whizweld Branchlet welding outlet. The Adjuster is an inexpensive fitting that saves comeback labor by addressing the installation variances in the horizontal plane which account for the majority of comeback costs. The Dropster eliminates the traditional make-up labor of a reducing coupling and nipple in the field or shop. The Whizweld Branchlet with its compound contour design provides excellent fit for easy one-pass welding. Whizwelds are made for automatic welders.



AGF Manufacturing, Inc.

100 Quaker Lane
 Malvern, PA 19355-2479
 Tel: 610.240.4900
www.agfmfg.com

Founded:

1986

Primary Products/Services:

Fire Protection Valves and Accessories

Market Area:

International

Management:

Jim McHugh
 Email: jmchugh@agfmfg.com
 George McHugh
 Rich Pancoast

Sales Contact:

Jason Uder, National Sales
 Email: juder@agfmfg.com

Company Profile:

For over 30 years, AGF Manufacturing has designed and produced innovative fire sprinkler products that provide an unprecedented combination of reliability, versatility, and ease of use. AGF revolutionized the fire sprinkler industry with the Model 1000 TESTANDRAIN® single handle valve, which eliminated the time and space consuming traditional loop assembly. Since then, AGF has introduced several unique products that accommodate the varying demands of the fire protection industry and help manage fire safety systems more efficiently, resulting in more reliable systems that save resources. At AGF, we are continually working in the field to improve existing products and deliver innovative,

reliable, and code compatible fire protection products for commercial and residential fire sprinkler systems worldwide. Our product line includes: PURGENVENT™, COLLECTANDRAIN®, CORRINSITE™, TESTANDRAIN®, RemoteTEST®, Inspector'sTEST™, RiserPACK™, and TESTANSAVE™.

American AVK Company

2155 Meridian Boulevard
Minden, NV 89423
Tel: 775.552.1400
Fax: 775.783.1031
www.americanavk.com

Founded:
1985

Primary Products/Services:
Valves and Hydrants

Market Area:
North and South America

Hours:
8:00 am - 5:00 pm

Management:
Al Jurkonis, President

Sales Contact:
David Roe, Business Unit Manager
Tel: 775.552.1430
Email: droe@avkus.com

Company Profile:

American AVK is a leading US manufacturer of gate valves, fire hydrants and accessories for the water, wastewater, fire protection and irrigation industries. AVK was one of the first valve manufacturers in the world to develop and design the Resilient Seated Gate Valve. AVK is at the forefront of technology for products serving the Water Works and Fire Protection Industries. American AVK was incorporated in 1985 to introduce AVK gate valves to North America. AVK is in a state-of-the-art 180,000 sq. ft. manufacturing facility in Minden, NV. American AVK is a subsidiary of the AVK Group of Companies, a global manufacturer of valves, hydrants and accessories for the Water Works, Wastewater, Fire Protection, and Natural Gas Industries.

American Backflow Products Company

PO Box 37025
Tallahassee, FL 32315
Tel: 800.575.9618
www.backflowparts.com

Founded:
1976

Hours:
8:00 am - 6:00 pm

Management:
Mark Inman, COO
Email: imark@backflowparts.com

Company Profile:

American Backflow Products Company is your complete source for backflow preventer repair parts, accessories, and enclosures. Founded in 1976, our company is the nation's leading backflow preventer specialist, trusted by thousands of technicians, plumbing contractors, fire line contractors, irrigation contractors, building managers and city officials across the country. Our dedication to providing the most comprehensive selection of backflow preventer repair parts is second to none and only matched by the knowledge of our highly trained staff. We carry nearly every imaginable part for all the major brands of backflow preventers. Whether you have Ames, ARI, Conbraco Apollo, CLA-VAL, Febco, Flomatic, Hersey, Watts, Wilkins, Viking, or Rain Bird equipment, we stock the repair parts you need. Our Assembly Repair Matrix makes it easy to find the correct repair parts, repair procedures or specification sheets for all current backflow prevention assemblies. Select your manufacturer and model and all the information you need to repair the assembly will be displayed. If you are ordering parts online, simply select the order form button, fill it out and email it to us and a member of our staff will contact you within 24 hours to complete your order.

We use fast, reliable and insured shipping couriers to get your backflow parts to you, on time – every time anywhere in the country or around the world. We guarantee same day shipping, and our website even provides UPS tracking so you'll know where your order is and when it will arrive.



ARGCO

(Allied Rubber & Gasket Company)
3145 Tiger Run Court Suite 105
Carlsbad, CA 92010
Tel: 760.854.1015
Toll Free: 800.854.1015
Fax: 800.924.5922
www.argco.com

Founded:
1981

Primary Products/Services:
Fire Sprinkler Specialties, Fire Equipment, Piping Tools, Flexible Sprinkler Drops, Thread Sealants, Hangers & Fasteners, Pipe Fittings and Valves

Market Area:
International

Hours:
6:00 am - 4:00 pm M-F

Management:
Frank Bishop, Sales Manager
Tom Stoddard, Operations
Chris Mengel, Sales
Lawrence Kent, Sales
Big Wave Dave Shaughnessy, Sales
Tom Keigwin, Sales

Sales Contact:
Frank Bishop, Sales Manager
Tel: 800.854.1015

Company Profile:

Serving the industry since 1981, ARGCO's outside-the-box philosophy sets this company apart from the rest. Innovative products available nowhere else, great value on everyday sprinkler items within equal quality at half the price of the competition. The product line includes ARGCO's own brand of quality steel pipe working tools and replacement parts, flexible sprinkler drops, grooved pipe couplings and fittings, valves, thread sealants, and a great selection of fire sprinkler specialties. ARGCO.com offers customers a state-of-the-art online shopping experience that is unparalleled in the industry, with locations throughout the United States.

Armstrong Pumps

93 East Ave.
North Tonawanda, NY 14120-6527
Tel: 813.907.2484

armstrongfluidtechnology.com/en/products-and-services/fire-safety

ASC Engineered Solutions

(fmr. Anvil & Smith-Cooper International)

2 Holland Way
Exeter, NH 03833
Tel: 603.418.2800

www.asc-es.com

Founded:
1850

Primary Products/Services:

Pipe connections, grooved couplings and fittings, valves, hangers, strut framing, seismic bracing, flexible sprinkler connections, engineered hangers, digital design solutions and fabrication equipment.

Market Area:
Domestic USA and International

Hours:
8:00 am - 5:00 pm M-F

Management:
Jason Hild, CEO
Dean Taylor, Executive VP of Sales
Phil Schechinger, VP of Fire Protection Sales

Sales Contact:
Email: customerservice@asc-es.com

Company Profile:

ASC Engineered Solutions is defined by quality—in its products, services and support. With more than 1,400 employees, the company's portfolio of precision-engineered piping support, valves and connections provides products to more than 4,000 customers across industries, such as mechanical, industrial, fire protection, oil and gas, and commercial and residential construction. Its portfolio of leading brands includes ABZ Valve®, AFCON®, Anvil®, Anvil EPS, Anvil Services, Basic-PSA, Beck®, Catawissa, Cooplet®, FlexHead®, FPPI®, Gruvlok®, J.B. Smith, Merit®, North Alabama Pipe, Quadrant®, SCI®, Sharpe®, SlideLOK®, SPF® and SprinkFLEX®. With headquarters in Commerce, CA, and Exeter, NH, ASC also has ISO 9001:2015 certified production facilities in PA, TN, IL, TX, AL, LA, KS, and RI.



Asurio, Inc.

P.O. Box 20747
Boulder, CO 80308
Tel: 877.444.1488

www.asurio.com

Email: info@asurio.com

Founded:
2007

Primary Products/Services:
Life Safety Inspection & Data Collection Software

Market Area:
Global

Hours:
6 am - 6 pm M-F

Management:
Top Myers, President

Sales Contact:
Jack Coffelt, General Manager
Email: jack@asurio.com

Company Profile:

Developed by USA-based Asurio, Inc., the BirdDog Inspection & Data Collection System is one of the most powerful and versatile inspection systems on the market. BirdDog is cloud-based; offers NFPA 25, 10 & 72 inspections, and many more; and accommodates inspections for multiple industries, regions & inspection and data collection needs. The BirdDog Inspection System automates & streamlines gathering inspection data in the field, and the management, sharing, and reporting of inspection data to ensure compliance with regulations, risk management, or asset management. The BirdDog field interface operates on Apple, Android, and Microsoft platforms. The BirdDog Inspection System results in streamlined, more accurate inspections, improved compliance, minimized risk, savings in time & money, improved productivity, and more. Asurio is a Microsoft Partner and offers world-class cloud hosting & security on the Azure platform.

AutoSprink M.E.P. CAD

181 N Arroyo Grande Blvd Ste A105
Henderson, NV 89074-1631
Tel: 877.4188.526

www.mepcad.com

Brooks Equipment

10926 David Taylor Drive, Ste 300
Charlotte, NC 28262
Tel: 704.916.2474

www.brooksequipment.com

BuildingReports

1325 Satellite Blvd. Ste 1607
Suwanee, GA 30024
Tel: 770.495.1993

www.buildingreports.com



Founded:
2000

Primary Products/Services:
Inspection and compliance reporting software

Market Area:
Worldwide

Hours:
8:00 am - 5:00 pm M-F

Management:
Jason Kronz, President & CTO
Dwight Wills, V.P., Sales & Marketing

Sales Contact:
Dwight Wills, V.P., Sales & Marketing
Tel: 770.495.1993
Email: sales@buildingreports.com

Company Profile:

Building safety compliance is critical to service companies, building owners and fire and safety officials who are charged with safeguarding occupants. BuildingReports' leading mobile and online inspection reporting solutions enable inspectors to quickly gather data on fire and life safety devices to ensure they are working properly and meet code requirements or identify actions needed to meet compliance through easily verifiable inspection reports. With over 8 million inspection reports to date, more than 16 billion square feet of floor space in over 1 million buildings, and over 500 million devices represented, BuildingReports has earned its reputation as the most trusted name in compliance reporting.



Bull Moose Tube

1819 Clarkson Road
Chesterfield, MO 63017
Tel: 636.537.2600

www.bullmoosetube.com

Founded:

1962

Primary Products/Services:

Sprinkler Pipe

Market Area:

North America

Hours:

8:00 am - 5:00 pm M-F

Management:

Tom Modrowski, President & CEO
John Krupinski, CFO
Andy Annakin, EVP & Chief Commercial Officer

Sales Contact:

Dave Weinrich, Director of Sales – Fire Protection
Tel: 636.537.2600
Email: dave.weinrich@bullmooseindustries.com

Company Profile:

Bull Moose was founded in 1962, building from the start on core values such as reliable quality, stable production, and exemplary service. The following decades have seen Bull Moose grow from a single plant in MO to seven production operations from coast to coast. Investment in a new facility under construction in Sinton, TX will further enhance our superior geographic footprint and will broaden our product offering through 10" pipe.

Bull Moose Advantages:

- Most stocking locations in the industry, for best delivery and availability.
- UL listed (US & Canada) and FM Approved.
- ASTM A135 and A795 Type E. Grade A Certified.
- Complies with NFPA 13, 13R and 14.
- Industry-leading hydraulic characteristics.
- CRR of 1.0 and greater.
- All pipe NDT weld tested
- Plain end or roll groove.
- EddyGuard II® bacterial resistant internal coating.
- Custom Length Options.
- Hot dipped galvanization
- Compatible for use in wet, dry, pre-action and deluge sprinkler systems.

BusyBusy

475 S Donlee Dr
St. George, UT 84770-5231
Tel: 435.414.8598

www.busybusy.com

Email: info@busybusy.com

C-Aire Compressors

380 W 1st St
Dresser, WI 54009-9042
Tel: 651.462.3440
Toll Free: 800.762.2247
Fax: 651.462.1232

www.cairecompressors.com

Founded:

1979

Product & Services:

Air compressors, Quiet compressors, Dry Air compressors, Base plate compressors, Oil Lubricated tank compressors. Air maintenance devices. Compressor maintenance and repair service.

Market Area:

North America

Management:

Jason Hedeem, CEO

Sales Contact:

Tom Blair, Sales Director
Email: sales@caireinc.net

Company Profile:

C-Aire is a leader in expert service, guaranteed quality, and breakthrough innovation in the Fire protection dry sprinkler market. Founded over 43 years ago, owners Jason and Carin Hedeem built the company on the core values of integrity, accountability, and a passion for fulfilling customer needs. Products are manufactured with the highest of standards from design to delivery. Constantly seeking to introduce innovations that simplify processes and solve industry challenges has become the hallmark of C-Aire. Call C-Aire today and get connected within seconds to a highly trained representative who will assist you with all your needs. Visit our website to see our complete product and service offerings that include:

Quiet Series – perfect for apartment buildings, nursing homes, institutions, and office buildings
Dry Series – targeted specifically for corrosion free applications and refrigerated/freezer facilities.

AMD Gen 3 with Leak Detection™ – set pressure in seconds and measure air leaks to maintain optimal dry sprinkler system performance.

Chicago Backflow, Inc

12607 S. Laramie Avenue
Alsip, IL 60803
Tel: 708.389.5600

www.backflow.com

Founded:

1993

Primary Products/Services:

Backflow Prevention Service, Testing, Installation and Inspection

Market Area:

Northern IL and Northwest Indiana

Hours:

8:00 am - 4:30 pm M-F

Management:

Michael Eisenhauer, President
Douglas Eisenhauer, VP

Sales Contact:

Barb Jonas, Office Manager
Email: contact@backflow.com

Company Profile:

Chicago Backflow, Inc. is the Premier Backflow Testing Company. We have been serving Northern IL and Northwest Indiana since 1993. We are dedicated to protecting your drinking water.

Offering full-warranty backflow testing & service. Any and all repair parts, labor and return trips are covered. Never worry about costly repairs to your backflow preventer. We carry over \$400,000 in inventory parts and are available 24/7.

Clarke Fire Protection Products, Inc.

100 Progress Place
Cincinnati, OH 45246
Tel: 513.475.3473

www.clarkefire.com

Founded:

1964

Primary Products/Services:

Diesel Engine Fire Pump Drivers

Market Area:

Global

Hours:

24/7

Management:

Dane Petrie - CEO
John Whitney - President
Justin Strousse - Director of Global Sales
Ken Wauligman - Engineering Manager

Brandon Cushman - Plant Manager
 John Whitney III - Customer Support Manager

Sales Contact:

Justin Strousse - Director of Global Sales
 Tel: 513.616.2891
 Email: jstrousse@clarkefire.com

Company Profile:

Clarke Fire Protection Products is a global supplier of UL/FM diesel fire pump drivers, meeting NFPA20 and country-code requirements. Products include the pressure-limiting driver (PLD) and Tier 3 EPA-certified engines. Manufacturing locations are Cincinnati, OH and Coatbridge, Scotland.



Core & Main Fire Protection

1830 Craig Park Court
 St. Louis, MO 63146
 Tel: 800.492.6909

www.coreandmainfire.com

Primary Products/Services:

Full-line supplier and fabricator

Market Area:

National

Hours:

8:00 am - 5:00 pm M-F

Management:

Brad Cowles, President
 Hank Evans, Reg. Director of Operations
 Derek Allen, Regional Director West
 Lawson Brown, Regional Director East
 Bradley Moss, Regional Director Northeast
 Dave Stevens, Senior Manager, Business Development

Sales Contact:

Hank Evans, Reg. Director of Operations
 Email: hank.evans@coreandmain.com

Company Profile:

Core & Main Fire Protection offers a 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 provide superior customer service along with today's technology. Our fabrication facilities are backed by strict quality control procedures and offer custom fabrication to meet the needs of your next project.

**CORE & MAIN FIRE PROTECTION
 BRANCH LOCATIONS:**

MOBILE, AL
 4210 Halls Mill Rd.
 Mobile, AL 36693
 Tel: 251.406.8941
 Fax: 251.661.7804

PHOENIX, AZ
 1450 E Buckeye Rd.
 Phoenix, AZ 85034
 Tel: 602.256.0050
 Fax: 602.256.7117

HAYWARD, CA
 2407 Industrial Parkway W
 Hayward, CA 94545
 Tel: 510.441.1650
 Fax: 510.441.1620

SAN FRANCISCO, CA
 111 Toland St.
 San Francisco, CA 94124
 Tel: 415.431.8722
 Fax: 415.431.8567

SACRAMENTO, CA
 1120 Blumenfeld Drive
 Sacramento, CA 95815
 Tel: 916.565.0466
 Fax: 916.565.1852

FRESNO, CA
 4710 E Commerce Ave.
 Fresno, CA 93725
 Tel: 559.441.7171
 Fax: 559.441.7175

LA HABRA, CA
 751 E Lambert Rd.
 La Habra, CA 90631
 Tel: 562.690.8800
 Fax: 562.690.1419

LODI, CA
 1625 S Stockton St.
 Lodi, CA 95240
 Tel: 209.334.9768
 Fax: 209.334.9773

FONTANA, CA
 15535 Arrow Route
 Fontana, CA 92335
 Tel: 909.320.5306
 Fax: 909.356.8599

DENVER, CO
 4735 Leyden St.
 Denver, CO 80216
 Tel: 303.305.4507
 Fax: 720.941.4347

WINDSOR, CT
 1220 Kennedy Rd. Ste. 2
 Windsor, CT 06095
 Tel: 860.688.1780
 Fax: 860.688.1784

TAMPA, FL
 1801B Massaro Blvd.
 Tampa, FL 33619
 Tel: 813.626.4904
 Fax: 813.626.6912

ORLANDO, FL
 3655 Old Winter Garden Rd.
 Orlando, FL 32805
 Tel: 407.299.2275
 Fax: 407.298.5038

PALM BEACH, FL
 1751 Avenue L
 Riviera Beach, FL 33404
 Tel: 561.863.5600
 Fax: 561.845.6120

MIAMI, FL
 10810 NW 92nd Terrace Ste. 108
 Medley, FL 33178
 Tel: 305.477.2383
 Fax: 305.805.4923

JACKSONVILLE, FL
 11310 Distribution Ave. W
 Jacksonville, FL 32256
 Tel: 904.260.4705
 Fax: 904.260.4644

ATLANTA, GA
 2157 Tucker Industrial Rd.
 Tucker, GA 30084
 Tel: 770.414.1212
 Fax: 770.414.1883

CHICAGO, IL
 5144 W 73rd St.
 Bedford Park, IL 60638
 Tel: 708.728.9793
 FAX: 708.728.9826

INDIANAPOLIS, IN
 8615 E 33rd St.
 Indianapolis, IN 46226
 Tel: 317.898.4879
 Fax: 317.898.4868

COLUMBIA, MD
 9325 Snowden River Pkwy #C
 Columbia, MD 21046
 Tel: 410.290.8020
 Fax: 410.290.8019

BROCKTON, MA
1123 Pearl St.
Brockton, MA 02301
Tel: 508.894.0130
Fax: 508.894.0139

QUINCY, MA
210 Ricciuti Dr.
Quincy, MA 02169
Tel: 617.472.4575
Fax: 617.472.1612

ST. LOUIS, MO
13551 NW Industrial Dr.
Bridgeton, MO 63044
Tel: 314.291.5055
Fax: 314.291.5084

SALEM, NH
50 Northwestern Dr.
Salem, NH 03079
Tel: 603.685.3200
Fax: 603.685.3206

LYNDHURST, NJ
700 Schuyler Ave.
Lyndhurst, NJ 07071
Tel: 201.939.1100
Fax: 201.939.6095

WESTVILLE, NJ
1050 Broadway
Westville, NJ 08093
Tel: 856.742.9000
Fax: 856.742.1761

ALBANY, NY
75 Cohoes Ave.
Green Island, NY 12183
Tel: 518.270.2159
Fax: 518.270.8384

GARDEN CITY, NY
586 Commercial Ave.
Garden City, NY 11530
Tel: 516.222.8008
Fax: 516.222.9234

BRONX, NY
1536 Southern Blvd. Ste. 1
Bronx, NY 10460
Tel: 929.358.7610
Fax: 904.339.9338

BROOKLYN, NY
729 Hicks St.
Brooklyn, NY 11231
Tel: 718.669.7600
Fax: 718.669.7601

MASPETH, NY
58-58 56th St.
Maspeth, NY 11378
Tel: 718.456.7877
Fax: 718.456.7852

CHARLOTTE, NC
75 Odell School Rd. S
Concord, NC 28027
Tel: 704.784.4700
Fax: 704.789.9288

CLEVELAND, NC
10230 Statesville Blvd.
Cleveland, NC 27013
Tel: 704.278.1000
Fax: 704.278.4312

LAS VEGAS, NV
4035 W Oquendo Rd.
Las Vegas, NV 89118
Tel: 702.382.0331
Fax: 702.382.0671

CINCINNATI, OH
4325 Mulhauser Rd. Ste. 6
Fairfield, OH 45014
Tel: 513.642.7005
Fax: 513.860.1245

OK CITY, OK
4624 SW 23rd St.
OK City, OK 73128
Tel: 405.506.6206
Fax: 405.900.4367

PORTLAND, OR
12670 SW Leveton Dr.
Tualatin, OR 97062
Tel: 503.404.2650
Fax: 503.691.6001

PROVIDENCE, RI
225 York Ave.
Pawtucket, RI 02905
Tel: 401.490.9670
Fax: 401.490.6272

MEMPHIS, TN
3634 Cherry Rd.
Memphis, TN 38118
Tel: 901.745.3106
Fax: 901.370.6920

NASHVILLE, TN
413 Woodycrest Ave.
Nashville, TN 37210
Tel: 615.932.5656
Fax: 615.736.2760

AUSTIN, TX
1925 Picadilly Dr.
Round Rock, TX 78664
Tel: 737.273.7400
Fax: 737.273.7567

DALLAS, TX
9010 Sterling St.
Irving, TX 75063
Tel: 972.830.9370
Fax: 972.871.1365

HOUSTON, TX
606 West Rd.
Houston, TX 77038
Tel: 713.937.4568
Fax: 713.937.0493

SAN ANTONIO, TX
6215 Krempen Ave.
San Antonio, TX 78233
Tel: 210.247.4940
Fax: 210.637.6682

SALT LAKE CITY, UT
275 W 2855 S
Salt Lake City, UT 84115
Tel: 385.419.3950
Fax: 801.467.4099

SPRINGFIELD, VA
8080 Alban Rd. Unit D
Springfield, VA 22150
Tel: 703.270.4595
Fax: 703.440.5042

SEATTLE, WA
3002 Lind Ave. SW
Renton, WA 98057
Tel: 253-518-2560
Fax: 425.251.0362



Croker Division

Fire-End and Croker Corporation
7 Westchester Plaza
Elmsford, NY 10523
Tel: 914.592.3640
Toll Free: 800.729.3473
Fax: 914.592.3892
www.croker.com
Email: info@croker.com

Founded:
1911

Primary Products/Services:
Fire Protection Equipment

Market Area:

Domestic/International

Hours:

8:30 am - 4:30 pm M-F

Management:

Marc Caramucci, General Manager
 Peter Levine, VP, Sales & Marketing
 Douglas Loew, VP Export Sales

Sales Contact:

Peter Levine

Company Profile:

For over a century, Croker has manufactured and supplied the highest quality Fire Hose and 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 and comprehensive specification and purchasing reference guide. Our primary warehouse is in Elmsford, NY. We maintain inventory in Dallas, TX; Detroit, MI; Miami, FL; Cleveland, OH; and Wilmington, DE. The Croker product line includes Hose Valves, Pressure Regulating Valves (Pilot, Field Adjustable and Factory Set), Fire Department Connections (Flush, Exposed, Freestanding, Storz, High-Pressure), Fire Pump Test Connections, Roof Manifolds, Hose Rack & Reel Assemblies, Cabinets, Extinguishers, Industrial Monitors, Nozzles, Grooved Couplings and Fittings, Adapters, ITM Equipment, and much more. Because our equipment is critical for protecting lives and property, we are continually striving to maintain and improve product quality year after year. Choose Croker for the finest quality products, competitive pricing, and exceptional service.

REGIONAL WAREHOUSES:

CROKER TX

1110 South Airport Circle Suite 110
 Euless, TX 76040
 Tel: 817.354.9900

Toll Free: 877.354.9905

Fax: 817.545.0055

Max Lombard, Regional Sales Manager
 Jake Lombard, Warehouse Manager

CROKER FL

4038 NE 5th Terrace Unit C
 Oakland Park, FL 33334

Tel: 954.314-8973

Fax: 954.314.8974

Joseph Benlolo, Regional Sales Manager

CST Industries, Inc

903 E 104th Street, Suite 900
 Kansas City, MO 64131

Tel: 844.44.TANKS

Fax: 913.621.2145

www.cstindustries.com

Founded:

1893

Primary Products/Services:

Fire Protection Storage Tanks

Market Area:

Global

Hours:

8:00 am - 5:00 pm M-F

Management:

Hal Whitacre, VP of Americas Sales

Sales Contact:

Ryan Schlick, Region Manager

Tel: 913.621.3700

Email: rschlick@cstindustries.com

Company Profile:

CST Industries, Inc. (formerly Columbian TecTank®/Columbian Steel Tank Company®) offers Fire Water Tanks for Commercial, Municipal, and Industrial Applications. With over 350,000 tanks in 125 countries, no other company can match CST's liquid storage tank design, manufacturing, and construction expertise. CST's factory-applied proprietary coating technologies are the best in the business and have been field proven for more than 50 years. CST leading brands, TecTank™, Columbian TecTank®, & AQUASTORE®, meet or exceed NFPA 22, FM, LPS, AWWA, USACOE & other industry standards & are manufactured in ISO 9001:2015 certified facilities. Tanks are available for construction by customer, dealer or CST with or without accessories.

Decoshield Systems, Inc.

3050 SW 14th Place #3

Boynton Beach, FL 33426

Tel: 800.873.0894

Fax: 800.585.3894

www.decoshield.com

Email: info@decoshield.com

Primary Products/Services:

Decorative covering and pipe hangers for fire sprinkler systems.

Management: Linda Camm, President

Sales Contact: Justin Penney

Email: justin@decoshield.com

DEWALT

701 E Joppa Rd,

Towson, MD 21286

Tel: 800.433.9258

www.dewalt.com

Primary Products/Services:

Power Tools, Anchors and Fastening

Market Area:

Global

Hours:

8:00 am - 5:00 pm M-F

Sales Contact:

Alex Schickling, Fire Protection Manager

Email: Alex.Schickling@Dewalt.com

Company Profile:

DEWALT is a leading manufacturer of industrial corded and cordless power tools, power tool accessories, and hand tools. As an innovation leader, you can find solutions for OSHA Silica Dust Compliance, FlexVolt for high powered applications, cast-in-place concrete anchors, mechanical post installed anchors, and jobsite safety focus with Perform and Protect.

DEWALT currently has 7 manufacturing locations in the USA, 44 total for Stanley Black and Decker, and remains committed to domestic manufacturing and produced over 400 million individual units of power tools, hand tools, storage and accessories in the United States with global materials since 2016.

DEWALT tools can be found nationally and internationally, wherever tools are sold. With more than 1,000 factory-owned and authorized locations, DEWALT has one of the most extensive service and repair networks in North America. Made in the USA with global materials.

For more information, visit www.dewalt.com or follow DEWALT on Facebook, Twitter, and Instagram.

Driven Fire Consultants

910 N. Sycamore Ave,

Sioux Falls, SD 57110

Tel: 605.444.9290

www.drivenfire.com

Email: info@drivenfire.com

Founded:

2015

Products/Services: Driven Fire Consultants is a design and consulting firm specializing in fire sprinkler systems.

Management:

Darin Syverson and Jared Van Gammeren

Sales Contact:

Jared Van Gammeren
Tel: 605.444.3762
Email: jaredv@drivenfire.com

Company Profile:

Driven Fire Consultants is a design and consulting firm specializing in fire sprinkler systems. We work with construction managers, contractors, architects, engineers, and building owners to create code compliant and cost-effective fire protection systems for all types of buildings. Let us help you better understand your fire protection needs, solve your fire sprinkler problems, and save you time and money along the way.

DUYAR

Osmangazi Mahallesi 2653
Sokak No: 7/1 34522 Esenyurt
Istanbul, TURKEY
Phone: +90 212.668.1808
www.duyar.com

Founded:

1965

Products/Services:

Fire Protection Valves, Sprinkler Heads, and Flow Switches

Management:

Huseyin Gumrukcu

Sales Contact:

Nazim Erdogan
Email: sales@duyar.com

Company Profile:

Manufacturer (Fire Protection Products)



Dyne Fire Protection Labs

2357 Ventura Drive Suite 108
Tel: 800-632-2304 or 651-917-0644
www.dyneusa.com
Email: lab@dyneusa.com

Founded:

1999

Products/Services:

Firefighting Foam, Antifreeze, Sprinklers, Dry Chemical, Total PFAS Analysis via TOF

Management:

Grant Lobdell, General Manager

Sales Contact:

Jennie Novak, Office & Marketing Manager
Email: jennie@dynefire.com

Company Profile:

Partnering to protect lives and property. Dyne is an ISO 9001-certified and ISO/IEC 17025 accredited (automatic field sprinklers) independent compliance testing laboratory serving customers throughout the world. Specializing in testing fire sprinklers, firefighting foam, dry chemical agents, and sprinkler system antifreeze solutions, Dyne partners with end-users and/or their designated representatives to help them meet the periodic lab testing requirements found in the various inspection, testing, and maintenance (ITM) standards such as NFPA 25 and IMO 1432. Dyne offers a 5-business day turnaround, unmatched customer service, and free sample kits with postage-paid shipping within the contiguous United States for most types of testing. Dyne also provides direct communication with laboratory staff, reports that are available by mail, email, and online, as well as a free reminder service, a monthly newsletter with technical articles, and informative webinars.



EDCOS, Inc.

330 Industrial Park
Mercedes, TX 78570-4300
Tel: 956.565.5660
Fax: 956.513.0469
www.edcos.com

Founded:

2004

Primary Products/Services:

Grooved Fittings, Pipe Valves, Fittings, Hangers, Foam, Bladder Tanks, other.

Market Area:

New Mexico, TX, Louisiana, Mexico, Central and South America, Caribbean

Hours:

8 am - 5 pm M-F

Management:

Elvia Valdez
Yvonne Gomez
Email: yvonne.gomez@edcos.com

Sales Contact:

Hayed Sanchez - International / Domestic Sales
Abigail Rodriguez - International / Domestic Sales
Email: sales@edcos.com

Company Profile:

We distribute and supply UL & FM, CE, VdA, and other listed approved fire protection equipment; Pipe, Valves, fittings, Grooved, Welded, Flanged, Mechanical Joint Fittings, Hangers, Butterfly Valves, Wafer Valves, Fire Hydrants, Post Indicators, Nozzles, Fire Hose, Angle Valves. From underground materials to all above ground. We also provide foam concentrate, bladder tanks, ILBP foam pump skids, grooving tools. FM200, CO2, Novac1230. We also cover mechanical contractors.
Give us an opportunity. Se Habla Español.

Eaton

(TOLCO™ & B-Line Series Products)
509 West Monroe
Highland, IL 62249
Tel: 800.851.7415
Fax: 800.356.1438
www.Eaton.com/TOLCO
Email: SeismicQuotes@Eaton.com

Founded:

1967

Primary Products/Services:

Seismic bracing, pipe hangers, strut systems, cable ladder/tray for MEP and Fire Protection, Engineering services and resources, and TOLBrace™ Software

Market Area:

Worldwide

Company Profile:

Eaton's TOLCO time-saving seismic bracing products and engineering solutions, along with B-Line series support systems, provide the fire protection market with a one-stop, reliable solution from pre-bid to final inspection.



Elkhart Brass

1302 W Beardsley Ave.
 Elkhart, Indiana 46514
 Tel: 574.295.8330

www.elkhartbrass.com

Founded:
 1902

Products/Services:

Pressure Reducing Valves, Pressure Restricting Valves, Hose/Angle Valves, Field Adjustable Pressure Reducing Valves, Fire Department Connections, Standpipe Accessories including: Pressure and Flow Gauges, Gate Valves, Drain Elbows and Adapters

Sales Contact:

Erasmus Acquah
 Sr. Product Manager
 Tel: 574.361.9516
 Email: eacquah@safefleet.net

Company Profile:

Elkhart Brass has been a proven leader in the fire suppression industry since 1902. Providing innovative and proven solutions, while placing equal importance on commitment to quality, value, and customer service. Our vast product line includes handline nozzles, monitors, gauges, and flowmeters. Also included in our product offering are Pressure Reducing Valves, Pressure Restricting Valves, Hose/Angle Valves, Field Adjustable Pressure Reducing Valves, and other Standpipe Accessories.



Engineered Corrosion Solutions

11336 Lackland Road
 St. Louis MO 63146
 Phone: 314.432.1377

www.ecscorrosion.com

Email: sales@ecscorrosion.com

Founded:
 2003

Products/Services:

Nitrogen generators, automatic air vents, corrosion monitoring devices, corrosion assessment services, corrosion training services

Management:

Jeff Kochelek – CEO

Adam Hilton – President

Sales Contact:

Andrew Loeffelman, VP Sales

Company Profile:

We are innovators at the intersection of corrosion and fire protection. As an organization, we have over 100 years of experience working in the fire protection industry, and we are an ISO 9001 certified company. ECS sells direct to the fire sprinkler contractor which allows us to provide industry-best lead times and customer service.



Ferguson Fire & Fabrication

Corporate Headquarters

800 South 4th Avenue

Mansfield, TX 76063

Tel: 817.276.7060

Fax: 817.473.3059

www.fergusonfire.com

Founded:
 1989

Primary Products/Services:

Fire Sprinkler Material, Special Hazards, Engineered Products and Fabrication.

Market Area:

Continental United States plus Alaska

Hours:

7:00 am - 4:30 pm M-F

Management

George DiMatteo, V.P. - Fire Protection

Company Profile

Ferguson Fire & Fabrication supplies the highest quality fire protection equipment to our customers nationwide. With locations across the nation and industry leading associates, we have the reach to supply the most demanding fire protection jobs in the country. Many of our locations have fabrication capabilities and are ISO Certified, making us the largest ISO Certified fabricator in the country. We offer our customers world-class customer service and unmatched industry expertise. Our associates enthusiastically use their experience to make sure each warehouse location operates in the best interest of the customer and the needs of that local market. From core fire protection products and fabrication to engineered fire protection products, we offer customer access to one of the most comprehensive inventories in the industry. Our supply chain, digital capabilities and vendor partnerships allow us to provide customers with a forward-thinking competitive

advantage. Ferguson Fire & Fabrication is a complete source for all fire protection needs.



FireDos US

9000 Hempstead Rd Ste 280,

Houston, TX 77008

Tel: 281.721.4542

www.firedos.com

Email: info@firedos.com

Founded:
 1979

Products/Services:

Foam Proportioners, Fire Monitors

Sales Contacts:

candace.mokwa@firedos.com

joe.stonecypher@firedos.com

Company Profile:

Manufacturer of FM-approved monitors and FM-approved foam proportioners. Environmentally conscious foam proportioners prove their proportioning rate without generating foam. Proportioning is accurate for virtually all viscosities of concentrates, with wide flow rate ranges. FM approvals are independent of concentrate used. Fully automatic (with IR sensing) and remote-operated monitors available with flows over 15,000gpm.

FL Catastrophe Corporation

(FLA-CAT)

7214 Edgewater Dr., Orlando, FL 32810

Tel: 855-352-2281

www.fla-cat.com

Founded: 1981

Products/Services:

At FLA-CAT, we understand that disasters can occur at any time, which is why we provide resourceful solutions and around-the-clock availability when fire, flood, or storm damage occurs to your property. No job is too large or too small for our valued clients—we service commercial, industrial, municipal, apartments, hotels, schools, and more. Our restoration experts mobilize quickly to all Central FL to provide the highest-quality services and restore your home or business to its original state.

Sales Contact:

Brianna Lemerise

Brianna@fla-cat.com

FormLink Systems

P.O. Box 23585
Hilton Head Island, SC 29925-3585
Tel: 317.735.3345
Fax: 317.735.3342
www.formlinksystems.com
Email: sales@formlinksystems.com

Company Profile:

FormLink's easy to use inspection software saves you time and money. With form packages for NFPA-25, NFPA-72, fire extinguishers, and more, you can deliver professional reports in minutes, directly to your customers. We also have the ability to create custom forms to satisfy any specific requirements outside of the standard forms or you can create your own with our custom form builder. Get great software and exceptional customer service, all with no hassle. Make the choice that will change how you do business by partnering with FormLink Systems!

Fox Sprinkler Supply Corporation

951 Estes Court
Schaumburg, IL 60193
Tel: 847.524.8250
Fax: 847.524.8262
www.foxsprinkler.com

Founded:
2000

Primary Products/Services:
Distribution/Fabrication

Market Area:
IL, IN, IA, KY, WI, MN

Hours:
Mon 5:30 am - 5:00 pm
Tue-Wed 4:30 am - 5:00 pm
Th-Fri 5:30 am - 5:00 pm
Sat 8:00 am - 12:00 pm

Management:
Danielle Sandfox, President
Linda Menini, Secretary
Dan Rossol, Operation Manager

Sales Contacts:
Troy Kole
Shannon Davis

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 in experience in the fire sprinkler industry.



Gast Manufacturing

a Unit of IDEX Corporation
2300 M-139 Hwy
Benton Harbor, MI 49022
Tel: 269.934.1298
www.gastmfg.com

Founded:
1921

Primary Products/Services:
Gast designs and manufactures air compressors for Dry and Pre-Action sprinkler systems. Gast also provides training on air compressors for the sprinkler industry.

Hours:
8:00 a.m. - 5 pm M-F

Management:
Sal Iaccino, Business Line Leader

Sales Contact:
Bo Coffman, Sr. Manager Targeted Growth
Tel: 941.416.0252
Email: BCoffman@idexcorp.com

Company Profile:

Since 1921, Gast Manufacturing, Inc. has been a leader in the design and manufacturing of quality air-moving products. We specialize in offering cost effective solutions for a wide variety of industries including Fire & Safety, Industrial manufacturing, Healthcare, and Environmental applications. Gast's wide array of pneumatic products include compressors, vacuum pumps, air motors, vacuum generators and regenerative blowers - all tailored to meet the many challenging applications of OEMs and end users worldwide.



GC Track

Av. Hacienda del Rio #3500.
Mexicali, Baja CA
Tel: +52 55 1935 0725
www.gc-track.com

Founded:
2016

Management:
Pablo Cazarin, Commercial Director
Email: pablo.cazarin@gc-track.com



General Air Products, Inc.

118 Summit Drive
Exton, PA 19341
Tel: 610.524.8950
Toll Free: 800.345.8207
Fax: 610.524.8965
www.generalairproducts.com

Founded:
1936

Primary Products/Services:
Air compressors / Nitrogen generators / 13D Pump and Tank Systems / Air Maintenance Devices

Market Area:
Worldwide

Hours:
8:00 am - 5:00 pm M-F

Management:
Raymond M. Fremont Jr., President
Dave English, Sales Director
Jim Doherty, Marketing Director
Sales Contact:
David Fremont

Company Profile:

General Air Products, Inc. has been a leader in the fire protection industry for over 50 years. Manufacturing a complete line of dry pipe system filling equipment—including air compressors, nitrogen generators, and dry air generators—has uniquely positioned us as the authority for complete dry sprinkler system filling solutions. We also offer a line of single family 13D pump and tank systems. Our quality products come guaranteed with unparalleled customer service both before and after the sale.

Guardian Fire Equipment

3430 NW 38th Street
Miami, FL 33142
Toll Free: 800.327.6584
Fax: 800.827.3869
www.guardianfire.com

Primary Products/Services:
Fire Standpipe Equipment

Market Area:
Worldwide

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

Harrington, Inc.

LDH System Specialists



Harrington, Inc.

2630 West 21st Street
Erie, PA 16506
Tel: 814.838.3957
Toll Free: 800.553.0078
www.hydrantstorz.com
Email: info@harrinc.com

Founded:
1988

Primary Products/Services:

Hydrant Storz adapter assemblies, Water supply connections, gate valves, Storz, threaded, and flange adapters, gated wyes

Market Area:
Worldwide

Hours:
8:00 am - 5:00 pm M-F

Management:
Tim Harrington, Vice President

Sales Contact:
Paul Carpenter, VP of Sales
Email: paulc@harrinc.com

Company Profile:

Harrington, Inc. is a manufacturer of Hydrant Storz assemblies, intake valves, gate valves, adapters-threaded, adapters-Storz, and adapters-flange, suction hose, wyes, Siamese, Storz couplings and adapters.

HOSE MONSTER COMPANY

The Hose Monster Company

1330 Ensell Rd
Lake Zurich, IL 60047
Tel: 847.434.0101
Toll Free: 888.202.9987
Fax: 847.434.0073
www.hosemonster.com

Founded:
1996

Primary Products/Services:

Fire pump and flow test equipment

Market Area:
Global

Hours:
8:00 am - 5:00 pm M-Th
8:00 am - 4:00 pm F

Sales Contact:

Michael Anderson, Sales Manager

Company Profile:

The Hose Monster Company is dedicated to providing equipment, software and procedural solutions that make the jobs of maintaining water-based fire protection systems and water distribution systems more accurate, more efficient and more reliable. All our products are designed to give accurate information about the water supply that is available to fight a fire at any given moment.

HRS Systems, Inc.

208 Southside Square
Petersburg, TN 37144
Tel: 931.659.9760
Fax: 931.659.9763
www.hrssystem.com
Email: hass@hrssystem.com

Primary Products/Services:

Fire Protection Engineering Software

Company Profile:

HRS Systems, Inc. is a dynamic fire protection engineering software development and marketing entity. Our goal is to provide fire protection engineering software – second to none – worldwide. Accuracy of calculations and results are paramount, with ease of data entry and attention to user comments and suggestions ranking a close second. Annual updates, at no extra charge, often introduce new features; the JOB COST ESTIMATOR is now included in both HASS® and COOSA® (below) as utilities.

HRS Systems, Inc. presents:

- HASS® for hydraulic analysis of sprinkler systems
- JOB COST ESTIMATOR for cost estimating
- HASS HOUSE® for residential sprinkler analysis
- COOSA® for CO2 system analysis.

All of them are Windows-Based (32 & 64 bit) and available in both English and metric Units plus metric units/Spanish text.

Hydratec, Inc.

64 Haverhill Road
Windham, NH 03087
Tel: 603.434.0502
Fax: 603.434.1348
www.hydratecinc.com

Founded:
1972

Primary Products/Services:

Fire Protection Design Software and Service using Revit or AutoCAD

Market Area:
Worldwide

Hours:
9:00 am - 5:00 pm M-F

Management:
Alan Johnston, President
Email: al@hydracad.com

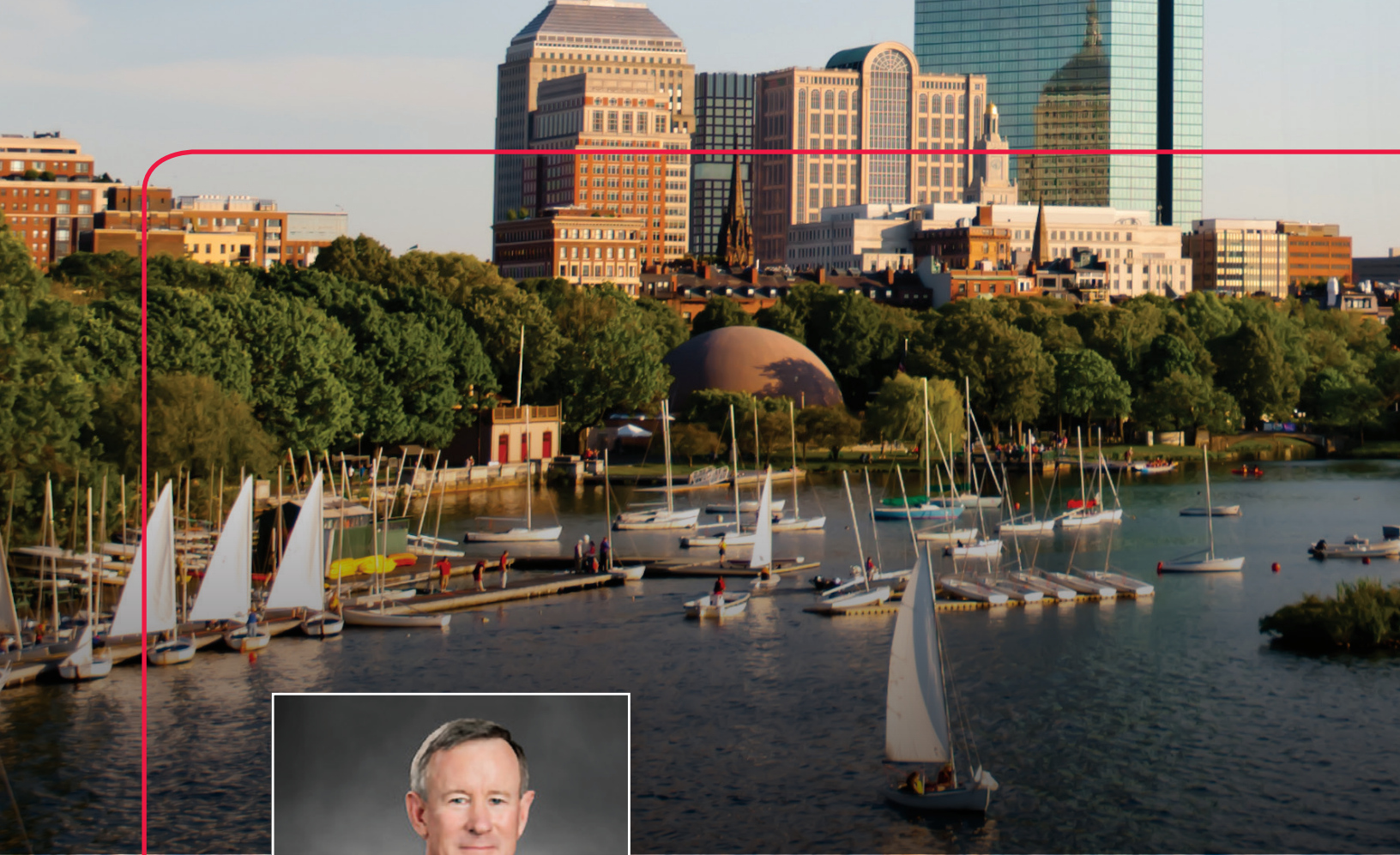
Sales Contact:
Art Dove, CAD Development Manager
Email: sales@hydracad.com

Company Profile:

Hydratec has been providing quality software and design services for over 45 years. Our complete line of software products, along with accessible and knowledgeable customer service, gives the Hydratec customer of any size or experience level 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 and Hydratec for Revit for direct design, listing and calculations completely within a Revit model. These packages can be used separately, or as an integrated set to provide the best possible AutoCAD or Revit-based solution for 2D or 3D design, BIM, coordination, and true Revit content integration.

IESO

Calz. Manuel Gómez Morín 488.
Col. Ex-Ejido Coahuila.
Mexicali, Baja CA.
México.
C.P. 21360
Tel: +52 686.568.9383
<http://ieso.com.mx>



DON'T MISS A KEYNOTE SPEAKER WHO KNOWS ABOUT WORKING TOGETHER TO PROTECT THE WORLD.

Admiral William H. McRaven
NFPA Conference & Expo® 2022 • Boston, MA

General Session Overview

Leadership. Admiral McRaven and NFPA CEO and President Jim Pauley will speak to it. Learn how leadership in a changing world helps us manage new safety challenges, technologies, emerging threats, and untapped opportunities. Walk away knowing how to effect change to protect our world today.

Customize your Conference & Expo experience.

Different pass options give you exactly what you want at the price you want to pay. We will offer various options to attend the Conference & Expo, from a Full ConferenceAdvantage™ Pass to a three day ExpoAdvantage™ Pass. All passes will feature access to General Session, exhibitor presentations, and much more!

**IT'S A BIG WORLD.
LET'S PROTECT IT TOGETHER.®**



CONFERENCE & EXPO

JUNE 6–9, 2022
BOSTON, MA

WHAT WE DO HERE IMPROVES SAFETY EVERYWHERE.

June 6–9 | Boston, MA

Come see what's next for us at the **2022 NFPA CONFERENCE & EXPO BOSTON.**

Our mission is to help save lives and reduce loss through information, knowledge, and passion.

- Learn about the latest cutting-edge developments in building safety, life safety, first response, and more.
- Absorb best-in-class training and gain greater expertise and Continuing Education Credits.
- Take in world-class exhibitors, speakers, education sessions, and hands-on demonstrations.
- Access knowledge about best practices, codes, and standards via onsite technical experts.

Exhibitors with the right stuff. Products. Systems. Service. Knowledge.

Discover the latest fire and safety products and services from leaders around the world. Learn about the latest technologies. Evaluate thousands of products. Experience hands-on demonstrations. Learn how to comply with code for design, construction, and operation of buildings and facilities of every kind.

LEARN MORE

nfpa.org/conference
800-344-3555



Inspect Point

24 4th Street
Troy, NY 12180
Tel: 888.287.1471

www.inspectpoint.com

Founded:

2014

Primary Products/Services:

SaaS for fire protection.

Market Area:

North America

Hours:

8:00 am - 5:00 pm

Sales Contact:

sales@inspectpoint.com

Company Profile:

Inspect Point is a fire protection platform for ITM (Inspection, Testing, and Maintenance) Service Contractors. Our tools help companies manage their inspections, proposals, and dispatching seamlessly through a web portal and mobile App.

Featuring the most extensive library of built-in NFPA forms, Inspect Point was created by industry insiders for the inspection industry. Enjoyed by thousands, and updated frequently, Inspect Point is the most trusted name in fire inspection software.

Inspection Reports Online (IROL)

PO Box 277
Big Rock, IL 60511
Tel: 331.454.7800

www.InspectionReportsOnline.net

Email: info@irol-llc.net

ITW Commercial Construction

(Buildex-SAMMY)
700 High Grove Blvd.
Glendale Heights, IL 60139
Tel: 630.694.4675

www.itwbuildex.com

Founded: 1967

Primary Products/Services:

Pipe Hangers

Market Area:

National

Hours:

8:00 am - 5:00 pm M-F

Management:

J. Schneider, National Mktg Mgr.
Ben Nolen, Product Mktg Mgr.

Sales Contact:

Bryant Hope, National Sales Mgr.

Company Profile:

ITW Commercial Construction is a division of IL Tool Works, has been a leading manufacturer of fastener systems for the construction industry. Our mission is to provide value-added, innovative product solutions to help contractors and architects build high quality buildings. SAMMYS® suspended anchoring systems have been providing vertical and horizontal overhead structural attachment solutions for decades. They are manufactured to meet the design challenges of modern structures and are aesthetically compatible with green design principles seeking to provide borrowed lighting and space framing benefits. All Sammys are made here in the USA, using the Teks® and Tapcon® technology preferred by US contractors for years. Sammys are best known in the fire sprinkler industry, but are adaptable for use in plumbing, electrical and HVAC applications.

JG Innovations, Inc.

P.O. Box 8128
Janesville, WI 53547-8128
Tel: 608.314.8710
Fax: 608.314.8712

www.jgius.com

Founded:

2009

Primary Products/Services:

Soffi-Steel® System
JGI Interlock™ Concealment Systems
ALumA-Fit™ Concealment System

Market Area:

Nationwide

Hours:

8:00 am - 5:00 pm M-F

Sales Contact:

Allen Stowers, President
Tel: 608.314.8710
Email: sales@jgius.com

Company Profile:

JG Innovations, Inc. offers the Soffi-Steel® and Interlock™ concealment systems for the purpose of concealing Fire Sprinkler Systems,

Piping, Plumbing, HVAC, Finned Tube, Ductwork and Cable. The Soffi-Steel® and Interlock™ Concealment Systems are made in the USA, produced from A60/G90 galvanized steel and carry industry approvals and certifications in the US and Canada such as FM Approval and UL/ULC Listings. While our custom fabricated enclosure systems are unsurpassed in retrofit applications, the flexible design makes it equally impressive for new construction projects. Utilize the Soffi-Steel® and Interlock™ Concealment Systems for applications in: • Universities • College Dormitories • Student Housing • PK-12 Schools • Nursing Homes • Assisted Living Communities • Affordable Housing • High-Rises/Condominiums • VA Hospitals and Clinics • Psychiatric Facilities • Detention Centers • Jails and Prisons • Residential Properties • Commercial Buildings



Simply.
More.
Safety.

JOB GmbH

Kurt-Fischer-Str. 30
22926 Ahrensburg
Germany
Tel: +49-4102-2114-21
Mobile: +49-175-2628895

www.job-bulbs.com

Email: Teschner@job-bulbs.com

Johnson Controls, Fire Suppression

1400 Pennbrook Pkwy
Lansdale, PA 19446
Tel: 215.362.0700
Toll Free: 800.558.5236
Fax: 800.877.1295

www.Tyco-fire.com

www.Tyco-RapidResponse.com

www.SprinkCAD.com

www.Ansul.com

www.Pyrochem.com

www.Grinnell.com

www.OnlineTechXchange.com

Founded:

1850

Primary Products/Services:

Water & chemical-based fire suppression product, fire grooved piping products, sprinkler system design software, training services.

Market Area:

Global

Hours:

8:00 am - 6:30 pm M-F

Management:

Chris Eichmann, V.P. & G.M.

Sales Contact:

Michael Mottice, Director of Global Sales, Water & Mechanical
 Tel: 800.558.5236
 Fax: 800.877.1295

Company Profile:

Johnson Controls fire suppression solutions deliver an unmatched range of suppression systems, extinguishing agents, fire sprinklers and valves, design software, piping products, fittings, and fire-fighting equipment. We leverage our global scale and deep expertise to drive innovation, advance safety and solve the unique challenges of customers around the world. Our arsenal of brands includes some of the most trusted names in the industry, such as TYCO, RAPID RESPONSE, GRINNELL, SPRINKCAD, ANSUL, and CHEMGUARD.



Kennedy Valve

1021 E. Water Street
 Elmira, NY 14901
 Tel: 607.378.1429
 Email: barry.obrien@kennedyvalve.com
www.kennedyvalve.com

Founded:

1877

Primary Products/Services:

UL-FM Gate Valves, Grooved Check Valves, Grooved Gate Valves, Grooved BFVs, Wafer BFVs, Wafer Check Valves, Indicator Posts, Fire Hydrants

Hours:

7:30 am -5:00 pm M-F

Management:

Nate Pizzini, GM
 Barry O'Brien, Nat'l Sales Mgr., Fire
 Ken Brown, Fire Protection Market Mgr.

Sales Contact:

Barry O'Brien
 Email: barry.obrien@kennedyvalve.com

Company Profile:

Kennedy Valve is both an iron foundry and machining center for valves and hydrants located in Elmira, NY. We make 24" and down UL listed and FM approved gate valves, butterfly valves, check valves, indicator posts, as well as fire hydrants. Additionally, we offer the industry's only factory installed OS&Y tamper switch, the KVOS2. See also cadlibrary.kennedyvalve.com



Lubrizol

BlazeMaster® & freezemastrer™
 9911 Brecksville Road
 Brecksville, OH 44141
 Tel: 216.447.5330
www.BlazeMaster.com
<http://www.lubrizol.com/cpvc>
 Email: blazemastrer@lubrizol.com

Founded:

1984

Primary Products/Services:

BlazeMaster® Fire Protection Systems and freezemastrer™ Antifreeze

Management:

Lainey Liotta, Global Fire Protection Market Manager

Company Profile:

Lubrizol has delivered science, service, and safety to the fire sprinkler industry for over 40 years. Best known for its BlazeMaster® Fire Protection Systems, the most specified nonmetallic fire sprinkler piping system in the world, Lubrizol also manufactures UL-listed freezemastrer™ antifreeze, which offers systems superior protection from freezing temperatures and corrosion.



The Metraflex Company

2323 West Hubbard Street
 Chicago, IL 60612-1403
 Tel: 312.738.3800
www.metrafire.com

Founded:

1958

Primary Products/Services:

FireLoop, Seismic Breakaway Hanger

Market Area:

International

Hours:

8:30 am - 5:00 pm M-F

Sales Contact:

Jeremy Wright, Product Manager
 Email: jeremyw@metraflex.com

Company Profile:

Metraflex has been supplying piping specialty products since 1958. With the introduction of the UL listed FireLoop seismic expansion joint, Metraflex has brought its expertise in seismic expansion joints to the fire sprinkler industry. The introduction and rapid acceptance of the FireLoop for fire sprinkler systems, plus its compliance with NFPA 13 guidelines, has made it the seismic expansion joint of choice.

National Foam, Inc

350 East Union St.
 West Chester, PA 19382
 Tel: 800.334.3156
www.nationalfoam.com
 Email: customer.service@nationalfoam.com

Founded:

1819

Products/Services:

Fluorine free foam concentrates, mobile and fixed foam hardware (systems), design / engineering service of foam systems, management and engineering of fixed foam system conversion process - legacy foam to fluorine free foam, Firefighting training.

Management:

Bobby Nelson, General Manager
 Philip Novac, Product Manager

Sales Contact:

Bobby Nelson
 Email: bobby.nelson@nationalfoam.com

Company Profile:

National Foam is the recognized leader in fluorine free firefighting foam concentrates with expertise in design and engineering of fixed foam hardware systems. Capabilities include converting fixed foam system to Fluorine free foam systems. Universal Green, Muni Green Plus and Muni Green are U.L. listed and GreenScreen certified fluorine free foam concentrates. We provide on-site or off site custom designed municipal and industrial firefighting training with legacy and fluorine free foam techniques and strategy.



The Noble Company

7300 Enterprise Drive
Spring Lake, MI 49456
Tel: 800.878.5788
Fax: 231.799.8850
www.noblecompany.com

Founded:

1946

Hours:

8 am - 5 pm M-F

Management:

Dave Wormmeester, President
George Rudolph, National Sales Mgr.-Engineered Fluids

Sales Contact:

George Rudolph
Tel: 800.878.5788
Fax: 231.799.8850
Email: sales@noblecompany.com

Company Profile:

Founded in 1946, Noble Company manufactures premium-quality, innovative products for the Tile, Plumbing, Heating and Cooling, and Fire Sprinkler industries. Noble Company's Engineered Fluids Division manufactures freeze protection fluids for various applications such as Hydronic under-floor-heating, Solar Heating Systems, Geothermal Systems, and Fire Sprinkler Systems. Noble Company is an American-based company, manufacturing products in MI and Louisiana. Our products are designed and manufactured to exceed applicable industry standards and are engineered for reliability.

nVent CADDY

31700 Solon Road Solon, OH 44139
Phone: 440.248.0100
www.nVent.com

Founded:

1903

Primary Products/Services:

nVent CADDY is recognized as a leading provider of innovative solutions; delivering technical superiority, ease-of-use, and lowest total installed cost. Solutions & Services include: Seismic Bracing Products and Engineered Services, hangers and supports for the Fire Protection,

Mechanical, Plumbing and HVAC/R industries.

Market Area:

Global

Hours:

8 am - 5 pm

Management:

Mark P. Fallico Jr., Director of Sales USA
Electrical / Mechanical / Fire / Seismic
Tel: 813.439.9709
Email: Mark.Fallico@nVent.com

Sales Contact:

Mike Osso
Tel: 609.504.3301
Email: Mike.Osso@nVent.com

Company Profile:

nVent has industry-leading positions in industrial, commercial, residential, energy and infrastructure.

Our mission is to "Connect and Protect" our customers with inventive solutions, create safer systems and ensure a more secure world.

The name nVent reflects the legacy of innovation across our portfolio of brands that will serve as the foundation for the new company.

nVent employs approximately 9,000 people globally, with the main U.S. offices in Minneapolis, Minnesota.

PAC Pump & Systems, Inc.

106 Hobart St.
Hackensack, NJ 07601
Tel: 201.621.0500
Fax: 201.621.0506
www.pacpump.com

Founded:

2003

Primary Products/Services:

Fire pumps and controllers—sales and service.

Market Area:

NJ

Hours:

7:00 am - 6:00 pm M-F

Management:

William Casey, President
Craig Pastore, Sales & Service
Cate Griffing, Inside Sales

Sales Contact:

William Casey

Company Profile:

PAC Pump & Systems, Inc. is a distribution and service company whose dedicated team of engineers, sales personnel, customer service representatives, project managers, machinist, mechanics, and administrative personnel

offers years of experience in supplying rotating equipment and services. We ensure our staff is prepared to meet the requirements of each and every customer by investing in education, training and state-of-the-art technology. Our customers benefit from our unparalleled problem-solving strategies that have developed through our many years of experience.



PACE Supply Corp.

6000 State Farm Dr. Ste 200
Rohnert Park, CA 94928
Tel: 877.934.3473
www.pacesupply.com/Divisions/FireProtection
Email: firesales@pacesupply.com

Founded:

1994

Primary Products/Services:

Plumbing, Fire Protection & Fabrication, Pipe, Valves & Fittings, Pipe Supports, International, Plumbing Finish, Water Treatment, Wastewater, Waterworks, Residential and Commercial Hydronics, and Water Heater Solutions

Market Areas:

Northern CA & Hawaii

Hours:

6:30 am - 5:00 pm M-F

Management:

Fire Protection Manager:
Robert Lynch
Email: rlynch@pacesupply.com

Sales Contact:

Email: firesales@pacesupply.com

Company Profile:

PACE is a locally & employee-owned wholesale supply company serving CA and Hawaii with 20 wholesaler locations. PACE provides supplies to contractors and retailers. Our employee owners are proudly setting the PACE for supply and service!



Perimeter Solutions

1520 Brookfield Ave
 Green Bay, WI 54313-8808
 Tel: 920.593.9445

www.perimeter-solutions.com

Founded:

1967

Primary Products/Services:

Foam Concentrates, Foam Systems Hardware

Market Area:

Global

Hours:

7:30 am - 4:30 pm M-F

Management:

Edward Goldberg – CEO
 Steve Cornwall – Chief Commercial Officer
 Craig McDonnell – GM Americas
 Email: craig.mcdonnell@perimeter-solutions.com
 Todd Wayshville, Sales Director – Americas and West Coast Sales Manager
 Pat Dixon – East Coast Region Sales Manager
 Christian Groff – LATAM & Caribbean Sales Manager
 Jim Scott - Midwest Region Sales Manager
 Manny Tavares - Gulf Region Sales Manager

Sales Contact:

Todd Wayshville – Sales Director – Americas
 Email: Todd.Wayshville@perimeter-solutions.com

Company Profile:

Perimeter Solutions is a global leader in fluorine-free Class B firefighting foam concentrate technology and can help end-users transition away from persistent technologies such as PFAS and cyclic siloxane-based foam concentrates. The SOLBERG® RE-HEALING™ BRAND was the first fluorine free foam concentrate with a full complement of hardware both Underwriters Laboratory (UL) and Factory Mutual (FM) approved on the market, and we are continuing our leadership in innovation and technology development with new products introduced regularly.

Today, our fluorine-free line includes foams concentrates for hydrocarbon fuels, alcohol-resistant concentrates for polar solvent fuel fires, training foam, specialty foam, and a complete line of Class A foam concentrates. Our fluorine-free foam concentrates do not contain any intentionally added PFAS substances, including PFOS, PFOA, or persistent chemicals, such as cyclic siloxanes.

Perimeter Solutions is a leading fixed fire-fighting foam systems integrator with a broad foam technology portfolio and a growing range of fixed and mobile equipment options – along with the requisite listings and certifications that meet your applications needs.

PHD Manufacturing, Inc.

44018 Columbiana-Waterford Road
 Columbiana, OH 44408
 Tel: 574.536.3857
 Toll Free: 800.321.2736
 Fax: 330.482.2763
www.phd-mfg.com
 Email: customerservice@phd-mfg.com

Founded:

1972

Primary Products/Services:

PHD is a leading full line domestic manufacturer of UL, FM, MSS approved products for the Fire Protection, Mechanical, Industrial, Plumbing, and Electrical industries including: pipe hangers, beam clamps, CPVC straps, Seismic bracing, riser clamps, clevis hangers, two bolt clamps, threaded accessories, brackets, strut channel, and all accessories.

Market Area:

Global

Hours:

8:00 am - 5:00 pm M-F

Management:

Jonathon Corvino, President
 Kyle Hartman, Vice President of Sales
 Rick Persing, National Sales Manager, Sprinkler Division
 Gene Hancock, National Sales Manager, Electrical Division - Fire Protection
 Sales Contact:
 Rick Persing, National Sales Manager, Sprinkler Division
 Tel: 574.536.3857
 Email: rickp@phd-mfg.com
 Email: customerservice@phd-mfg.com

Company Profile:

PHD is the last private, family-owned full line pipe hanger, strut, and accessories manufacturer left in the USA. After recent expansions PHD has over 200,000 Sq. ft. facility and approximately 28 consigned stocking warehouse locations to facilitate our service.

Plumbers Supply Company

1000 E. Main Street
 Louisville, KY 40206
 Tel: 800.626.5133

www.plumbers-supply-co.com

Founded:

1921

Primary Products/Service:

Fire Protection, Plumbing, Hydraulics, HVAC
 Market Area: KY, TN, IN, Western WV VA

Hours:

7:00 am - 5:00 pm M-F

Management:

Brian Roberts, Fire Protection Sales Manager
 Tel: 317.783.2981
 Cell: 317.557.1559
 Email: Brian.Roberts@plumbers-supply-co.com

INSIDE SALES:

INDIANAPOLIS, INDIANA

Inside Sales Manager:

Jason Davis
 Tel: 317.472.8921
 Cell: 317.450.6764
 Email: Jason.Davis@plumbers-supply-co.com

Dale Sigler

Tel: 317.472.8903
 Email: Dale.Sigler@plumbers-supply-co.com

Cole Biggerstaff

Email: Cole.Biggerstaff@plumbers-supply-co.com

INSIDE SALES:

LOUISVILLE, KENTUCKY

Inside Sales Manager:

Mike Newton
 Tel: 502.540.0332
 Cell: 502.817.2079
 Email: Mike.Newton@plumbers-supply-co.com

Beau Jones

Tel: 502.540.0332
 Email: Beau.Jones@plumbers-supply-co.com

Inside Sales: Lexington, Kentucky

Ronnie Wilson
 Tel: 859.255.0700
 Cell: 859.621.5278
 Email: Ron.Wilson@plumbers-supply-co.com

INSIDE SALES:

EVANSVILLE, INDIANA

Brent Mabrey
Tel: 812.425.3115
Cell: 812.305.3203
Email: Brent.Mabrey@plumbers-supply-co.com

FIRE PROTECTION OUTSIDE SALES

KY, TN, SO. IN, WV

John Jutz
Tel: 502.540.0272
Cell: 502.376.0639
Email: John.Jutz@plumber-supply-co.com

Company Profile:

Started in 1921 as Plumbing and Mill Supply house. Plumbers Supply has opened branches and mini-branches in over ten locations in our area. Plumbers Supply has been a fire protection supply house of steel pipe and fittings since its inception, but has had a dedicated fire sprinkler sales division since late 1980's.

Polymer Molding, Inc.

1655 West 20th Street
Erie, PA 16502
Toll Free: 800.344.7584
Fax: 814.455.0289
www.polymermolding.com

Founded:

1978

Primary Products/Services:

Product Protection

Market Area:

Worldwide

Hours:

8:00 am - 5:00 pm M-F

Management:

Chris Vinson, Vice President, Sales



Potter Electric Signal Company

13723 Riverport Drive
St. Louis, MO 63043
Toll Free: 314.595.6900
Fax: 314.595.6999

www.pottersignal.com

Email: orders@pottersignal.com

Founded: 1898

Primary Products/Services:

Flow, Pressure, Tamper Switches, Corrosion Mitigation

Market Area:

Worldwide

Hours:

8:00 am - 5:00 pm M-F

Sales Contact:

Tim Freiner, Vice President – North American Sales

Email: sales@pottersignal.com

Company Profile:

Established in 1898, Potter Electric Signal Company produces a wide array of products including fire sprinkler monitoring systems, nitrogen generators, corrosion monitoring/testing, electronic fire systems, vault and safe security systems and boiler/chiller and industrial control 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 unequalled service and technical support. Every employee at Potter is committed to provide the very best product and service available for the protection of life and property. Potter is THE Symbol of Protection.

Company Profile:

Potter Roemer has been the leading supplier of architectural and mechanical products to the fire protection industry. From six regional shipping facilities, Potter Roemer has the inventory in stock and available for your project.

REGIONAL WAREHOUSES:

POTTER ROEMER – DALLAS
1500 Precision Drive, Suite 120
Plano, TX 75074
Tel: 866.644.3473

POTTER ROEMER – MIAMI
8306 NW 14th Street
Miami, FL 33126
Tel: 786.845.0842
Toll Free: 833.744.3473

POTTER ROEMER – ATLANTA
4110 Tench Road, Suite J
Suwanee, GA 30024
Tel: 770.904.3350

POTTER ROEMER – NY AREA
1480 Ridgeway Street
Union, NJ 07083
Tel: 908.964.5775
Toll Free: 800.526.4592

POTTER ROEMER – CHICAGO
1350 N Michael Drive
Wood Dale, IL 601091
Tel: 630.766.4545

Quick Response Fire Supply, LLC

11091 Air Park Road
Ashland, VA 23005
Tel: 703.975.8183

www.qrfs.com

Potter Roemer

PO Box 3527
City of Industry, CA 91744
Tel: 626.855.4899

www.potterroemer.com

Founded:

1937

Primary Products/Services:

Fire Protection Equipment

Market Area:

Worldwide

Management:

Randall Morris, Vice President Sales



Reliable Automatic Sprinkler Co., Inc.

103 Fairview Park Drive
 Elmsford, NY 10523
 Toll Free: 800.431.1588
 Fax: 800.848.6051

www.reliablesprinkler.com

Email: info@reliablesprinkler.com

Founded:

1920

Primary Products/Services:

Sprinklers, Valves, Special Hazards/Systems,
 System Components, and Fabrication

Market Area:

Worldwide

Management:

Kevin T. Fee – President

John McNamara – V.P., Corporate Sales

F.J. Fee IV – V.P., Marketing and Business
 Development

Kevin T. Fee, Jr. V.P., Sales – Americas

Adam Robotham – V.P., International Sales and
 Operations

Rex Schwendiman – V.P., System Components

Steve Wolin – V.P., Compliance/Product
 Technology

Company Profile:

Reliable Automatic Sprinkler Co., Inc. is a manufacturer and distributor of fire protection equipment. Reliable manufactures the highest quality and most innovative fire sprinklers, valves and special systems on the market. Reliable also distributes a full line of best-in-class system components. All Reliable products are backed with premier customer service. Reliable's corporate headquarters is located in Elmsford, NY with manufacturing headquarters in Liberty, SC. Regional sales and distribution centers are located throughout the US and around the world.

CORPORATE OFFICE:

103 Fairview Park Drive
 Elmsford, NY 10523
 Tel: 864.843.1700

MANUFACTURING FACILITY:

1470 Smith Grove Road
 Liberty, SC 29657
 Tel: 864.843.1700

DOMESTIC DISTRIBUTION:

ATLANTA, GA (Norcross, GA)
 800.652.1819 Tel
 800.848.6052 Fax

BOSTON, MA (Walpole, MA)
 800.431.1588 Tel
 800.848.6051 Fax

CHICAGO, IL (Bloomington, IL)
 800.228.6274 Tel
 800.848.6053 Fax

COLUMBUS, OH
 800.228.6274 Tel
 800.848.6053 Fax

DALLAS, TX
 800.442.6742 Tel
 800.848.6054 Fax

DENVER, CO
 877.440.2598 Tel
 877.205.7230 Fax

HOUSTON, TX
 866.978.9965 Tel
 866.978.9979 Fax

LOS ANGELES, CA (Brea, CA)
 800.352.4365 Tel
 800.848.6055 Fax

MIAMI, FL (Miramar, FL)
 954.437.2520 Tel
 954.437.2289 Fax

MINNEAPOLIS, MN (Roseville, MN)
 877.827.2816 Tel
 877.827.3043 Fax

NEW YORK, NY (Elmsford, NY)
 800.431.1588 Tel
 800.848.6051 Fax

ORLANDO, FL (Longwood, FL)
 800.801.3097 Tel
 800.862.0934 Fax

RICHMOND, VA
 866.927.7775 Tel
 866.927.7776 Fax

SAN ANTONIO, TX (Schertz, TX)
 866.927.9939 Tel
 844.383.0015 Fax

SEATTLE, WA (Kent, WA)
 877.327.2563 Tel
 877.327.2574 Fax

WASHINGTON, DC (Capitol Heights, MD)
 877.883.8831 Tel
 877.851.1553 Fax

WORLDWIDE DISTRIBUTION:

AUSTRALIA (Adelaide)
 +61 8 8162 9555 Tel
 +61 8 8162 9359 Fax

CANADA, EASTERN (Ontario)
 800.790.6443 Tel
 800.790.6486 Fax

CANADA, WESTERN (British Columbia)
 604.542.1864 Tel
 604.542.1894 Fax

CHINA (Shanghai)
 +86 21 5403 7021 Tel
 +86 21 5403 7022 Fax

GERMANY (Hamburg)
 +49 40 5589 81871 Tel
 +49 40 5589 81873 Fax

MEXICO AND LATIN AMERICA
 800.442.6742 Tel
 800.848.6054 Fax

POLAND (Sosnowiec)
 +48 (0) 32 66 18 285

SINGAPORE
 +65 6635 8100 Tel
 +65 6734 3176 Fax

UNITED ARAB EMIRATES (Dubai)
 +971 4 880 8830 Tel

UNITED KINGDOM (London)
 +44 13 4231 6800 Tel

FABRICATION FACILITIES:

DENVER, CO
 877.440.2598 Tel
 877.205.7230 Fax

GRAND PRAIRIE, TX
 972.352.6400 Tel
 972.352.6402 Fax

PORTLAND, OR
 877.523.3178 Tel
 877.418.2498 Fax



Response Fire Supply
3100 West Central Avenue
Santa Ana, CA 92704
Tel: 714.754.7100
www.responsefiresupply.com

Founded:
2013

Products/Services:
Fire Protection Supplies & Fabrication

Market Area:
CA, NV, AZ

Management:
Devin Doyle
Email: devin@responsefiresupply.com

RJB Wholesale, Inc.
12418 NE 124th Street
Kirkland, WA 98034
Tel: 206.707.3385



Rotaflow
6707 59 St NW
Edmonton, AB T6B 3P8 Canada
Tel: (+1) (780) 233 8644
www.rotaflow.ca

Founded:
1995

Products/Services:
"One Stop Shop" Industrial Fire Protection and Utilities, Engineering, Fabrication and Service.

Management:
ashami@rotaflow.ca

Sales Contact:
enquiries@rotaflow.ca

Company Profile:
Rotaflow is a mid-size, premier full-service Engineering, Procurement, and Construction Management (EPCM) company. Located in Edmonton, Alberta with an office in Fort McMurray, AB, we specialize in fire protection

and industrial utilities. For over 27 years, we've worked with the world's leading energy companies, including Suncor Energy, Gibsons, Husky, Cenovus, CNRL, Pembina Pipelines and Albian Sands. Customers and market influencers see us as subject matter experts in executing Fire Protection Industrial Utility projects from concept through CSU to operation. Our team of over 120 engineers, designers, and trades work collaboratively to design, build, retrofit, repair, operate, and maintain systems, protecting life and assets and enabling companies to focus on their core business. Large enough to deliver a full scope project and small enough for offer a 1-0-1 experience.

RP Equipment
502 Center St
PO Box 69
Maple Park, IL 60151
Tel: 630.272.7268
www.rpeequipment.net
Email: sales@rpeequipment.net



Safe Signal
13723 Riverport Drive
St. Louis, MO 63043
Tel: 844.597.8655
www.safesignalsprinkler.com
Email: orders@safesignalsprinkler.com

Founded:
2021

Products/Services:
Flow Switches, Pressure Switches, Supervisory Switches, Explosion Proof Devices

Management:
Andy L. Kaempfer – Product Line Leader

Sales Contact:
Chuck Kitts – Director of Business Development

Company Profile
At Safe Signal, we are committed to providing dependable electro-mechanical devices for fire sprinkler systems that are ready to serve when needed. We want to bring the industry an essential product that maintains the highest levels of life safety through exceptional quality, while providing our customers value through great service and technical support.



Snap Drill AS
Koppholen 9, 4313
Sandnes, Norway
Tel: +47 950 58 125
www.snapdrill.no
Email: martin@snapdrill.no

Founded:
2016

Products/Services:
Hand-held automatic hole cutting machine for pipes.

Management:
Martin Talgø – CEO
Tor Ole Talgø – Founder and inventor

Sales Contact:
Martin Talgø

Company Profile:
Snapdrill is the only hand-held and automatic hole cutting machine for pipes. The game changer in pipe hole cutting. Fasten the clamp, pull the trigger, and let Snapdrill do the work for you. With our patented technology you'll save time, money and improve work safety from the first cut. How? Self-centering clamp. Automatic feed. Carbide cutting teeth. Unparalleled stability. Incredible tool life and see to believe speed. Say good-bye to broken wrists, pilot bits and off-center outlets. Say hello to Snapdrill.

South-Tek Systems, LLC
3700 U.S. Highway 421 North
Wilmington, NC 28401
Tel: 888.526.6284
www.southteksystems.com

Founded:
1997

Primary Products/Services:
Nitrogen Generators / Corrosion Inhibiting Solutions

Market Area:
Worldwide

Sales Contact:
Jake Lehmann – Product Manager / Fire Protection Team Lead

Company Profile:
South-Tek Systems is the leading manufacturer of corrosion inhibiting solutions for dry, pre-action, and wet fire sprinkler systems, including N2Blast® and DeOx™ Technology.

Spears Manufacturing Company

15853 Olden Street
 Sylmar, CA 91392
 Tel: 818.364.1611
www.spearsmfg.com

SPP Pumps

2905 Pacific Dr.
 Norcross, GA 30071
 Tel: 770.409.3280
 Fax: 770.409.3290
www.spppumps.com
 Email: sales@spppumps.com

Founded:
 1875

Primary Products/Services:
 fire pumps and fire pump systems

Market Area:
 Global

Hours:
 8:00 am - 5:00 pm M-F

Management:
 John Kahren, President
 Jimmy Hunt, Director of Sales, Fire Division
 Veronica Bryant, Marketing Services

Sales Contact:
 Jimmy Hunt
 Tel: 770.409.3280 ext. 2204
 Email: james_hunt@spppumps.com

Company Profile:

SPP Pumps has been working with consultants, contractors, installers and end-users for more than a century to achieve the most cost-effective fire system pumping solutions. Since SPP Fire was formed in 1875, it has built a reputation for quality and value that has made it unquestionably the leading supplier of Approved Fire Protection Pumping Packages throughout the world. SPP Pumps has six facilities worldwide that offer the same attention to quality and value that has made SPP Pumps a market leader for over 100 years.

System Sensor

2101 Braden Ct
 Harleysville, PA 19438-2867
 Tel: 610.222.8081
www.systemsensor.com

Founded:
 1984

Primary Products/Services:
 Fire Sprinkler System Monitoring Products, Fire Detection and A/V Notification Devices

Market Area:
 Worldwide

Hours:
 7:30 am - 5:00 pm M-F

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.



TLX Fire & Security

N27 W23727 Paul Rd #200
 Pewaukee, WI 53072
 Tel: 262.970.8660
www.tlxfire.com

Founded:
 1996

Primary Products/Services:
 actuators, solenoids, and valves

Market Area:
 Fire Suppression

Sales Contact:
 Jason Busalacchi

Company Profile:

TLX Technologies engineers and manufactures custom electromagnetic release actuators and solenoids for the fire suppression industry. Our new supervised pilot-operated solenoid valve, engineered with an integrated supervision function, is designed to meet the requirements of the NFPA 13: Sec. 8.3.1.2.1 standard which went into effect January 1, 2021.



Talco Fire Systems

6040 NE 117th Ave.
 Portland, OR 97220-1012
 Tel: 503.668.1231
 Fax: 503.688.1234
www.talcofire.com
 Email: ks@talcofire.com

Founded:
 1981

Primary Products/Services:
 Residential and commercial packaged fire pump systems

Market Area:
 U.S. & Canada

Hours:
 8:00 am - 5:00 pm M-F

Sales Contact:
 James Yost, Director of Sales & Marketing
 Email: jyost@talcofire.com

Company Profile:

Talco Fire Systems has been building premium quality fire pump systems for over 30 years. Specializing in both residential and commercial packaged fire pump systems, we design & custom build packaged units to fit any application. Our packaged systems will save you time, money, and headaches. We pull it all together, you drop it in place. Whether you need our Home Hydrant® Residential Fire Pump and Tank for your home or ADU, or a 5000 GPM diesel driven fire system for a multi-warehouse complex – Talco has you covered.

Titus Industrial

14580 Midway Road
 Dallas, TX 75244
 Tel: 469.289.1773
www.titusindustrial.com
 Email: PVF@titusindustrial.com



Trident Fire & Fabrication, LLC

140 Grand Street
Carlstadt, NJ 07072
Tel: 201.402.9400
www.tridentfireandfab.com
Email: sales@tridentfireandfab.com

Founded:
2021

Products/Services:
Complete Fire Protection Fabrication and
Material Sales

Sales Contact:
Peter Braid

Company Profile:
At Trident Fire & Fabrication, we base our success on customer satisfaction. Our goal is to provide precision Pipe Fabrication utilizing the latest technologies guaranteeing superior quality, reliability, and a worry-free product. Our mission is to supply our customers with on time deliveries and cost-effective pricing while maintaining the highest quality standards and workmanship achievable.

United Brass Works, Inc.

714 South Main Street
Randleman, NC 27317
Tel: 800.334.3035
Fax: 800.498.4696
www.ubw.com
Email: sales@ubw.com

Founded:
1910

Primary Products/Services:
Bronze valves / custom cast and machined
products

Market Area:
Worldwide

Hours:
8:00 am - 5:00 pm M-F

Management:
Mike Berkelhammer, President

Sales Contact:
Jim Sattler, Sales Manager
Email: jim.sattler@ubw.com

Company Profile:

United Brass Works, Inc manufactures a wide range of bronze and ductile iron valves for fire sprinkler applications.



UNITED Fire Systems

1 Mark Rd. Kenilworth, NJ 07033
Tel: 908.688.0300
www.unitedfiresystems.com

Products/Services:
Manufacturer of specialized sprinkler equipment

Management:
Jonathan Kleber
Tel: 908.688.0300 x295
Email: jkleber@ufpco.com

Sales Contact:
Email: jsingh@ufpco.com

Company Profile:
UNITED Fire Systems specializes in manufacturing fire suppression equipment. Our products have unique qualities and features that set them apart from comparable competitors' products. Reputation and years of industry expertise are the driving factors that enable us to design and manufacture state-of-the-art protection equipment that cannot be found anywhere else.

Uponor Inc.

5925 148th Street West
Apple Valley, MN 55124-8197
Tel: 800.321.4739
www.uponor.com

Founded:
1918

Primary Products/Services:
Residential Fire Sprinkler Systems

Market Area:
North America

Management:
Justin Churchill, Residential Segment Manager
Email: justin.churchill@uponor.com

Company Profile:
Uponor AquaSAFE™ fire sprinkler systems are PEX-based solutions listed to UL 1821 that provide flexible options for NFPA 13D

applications, including multipurpose, stand-alone, and exposed applications. Uponor provides exceptional support, including design services with NICET IV certified drawings as well as training for installers and education for AHJs to get your projects completed efficiently and effectively.

Victaulic Company

4901 Kesslersville Road
Easton, PA 18040
Toll Free: 800.PICK.VIC
www.victaulic.com

Founded:
1925

Market Area:
Global

Management:
Scott Howser, V.P., Market Dev.

Company Profile:
As the world's leading producer of grooved mechanical pipe-joining systems, Victaulic works collaboratively with its customers and affiliates worldwide to deliver innovative solutions across our core business areas. Our products and services put people to work faster while increasing safety, ensuring reliability, and maximizing efficiency and sustainability. Visit www.victaulic.com and follow us on LinkedIn, Facebook, Twitter, and YouTube.

Viega, LLC

585 Interlocken Blvd
Broomfield, CO 80021-3486
Tel: 585-314-0055
www.viega.us



Viking Group, Inc.
 5150 Beltway Dr. SE
 Caledonia, MI 49316
 Telephone: (269) 945-9501
 Toll Free: (800) 968-9501
www.vikinggroupinc.com

Primary Products/Services:

- Fire Sprinklers and Systems
- Fire Protection Valves
- CPVC Pipe and Fittings
- Fabrication Services
- Grooved Piping System
- Steel Pipe
- Threaded Fittings
- Hangers & Fasteners
- Electrical Products
- Foam Systems
- FDC Equipment
- Backflow Prevention
- Tools & Accessories

Market Area:

Worldwide

Hours:

24/7/365

Management:

James Golinveaux, President and CEO,
 Viking Group, Inc.
 Jeremy Morton, COO, Viking Group, Inc.
 Martin Workman, VP - Product Management,
 Viking Group, Inc.
 Joe Bardowski, VP – Operations,
 Viking SupplyNet
 Mike Bosma, EVP – Sales - International,
 Viking SupplyNet
 Adam Owens, VP – Marketing and Strategic
 Partnerships
 Jim Lake, VP – Training and Technical Services

Sales Contact:

Ben Johnson, Director – U.S. Sales

Company Profile:

Together, the companies of Viking Group, Inc. (Viking Corporation, Viking SupplyNet, Viking Fabrication Services, and Viking Plastics) provide integrated solutions for any fire protection challenge. With a comprehensive range of products and services, Viking provides much more than fire protection hardware. We help streamline the work of our customers. We help improve their quality of service. We help them grow their business. The experience of our employees, our

commitment to advancing fire protection technology, and our high-quality, worry-free products and services all make Viking the single-source supplier for thousands of customers worldwide.

BRANCH OFFICES
UNITED STATES OF AMERICA

The Viking Corporation
 210 N. Industrial Park Drive
 Hastings, MI 49058
 Telephone: 800.968.9501
info@vikingcorp.com
techsvcs@vikingcorp.com

Viking Group, Inc.
 5150 Beltway SE
 Caledonia, MI 49316

VIKING SUPPLYNET LOCATIONS
NORTHEAST REGION

Viking SupplyNet (NY METRO)
 Telephone: (973) 541-2580
 Email: newyorkmetro@supplynet.com,
vfsnewyorkmetro@supplynet.com

Viking SupplyNet (NY CITY)
 Telephone: (973) 541-2320
 Email: nyc@supplynet.com

Viking SupplyNet (BOSTON)
 Telephone: (508) 594-1800
 Email: boston@supplynet.com

Viking SupplyNet (PHILADELPHIA)
 Telephone: (610) 279-3762
 Email: philadelphia@supplynet.com

Viking SupplyNet (BALTIMORE)
 Telephone: (301) 490-5514
 Email: baltimore@supplynet.com

Viking SupplyNet (RICHMOND)
 Telephone: (804) 228-1107
 Email: east@supplynet.com,
vfsrichmond@supplynet.com

Viking SupplyNet (FAIRFAX)
 Telephone: (571) 307-6600
 Email: fairFax@supplynet.com

SOUTHEAST REGION

Viking SupplyNet (ATLANTA)
 Telephone: (770) 446-3068
 Email: atlanta@supplynet.com,
vfsatlanta@supplynet.com

Viking SupplyNet (FT. LAUDERDALE)
 Telephone: (954) 791-1756
 Email: southfl@supplynet.com

Viking SupplyNet (ORLANDO)
 Telephone: (407) 656-7600
 Email: oralndo@supplynet.com

Viking SupplyNet (MEMPHIS)
 Telephone: (901) 360-9401
 Email: memphis@supplynet.com

Viking SupplyNet (NASHVILLE)
 Telephone: (615) 255-8393
 Email: nashville@supplynet.com,
vfnashville@supplynet.com

Viking SupplyNet (CHARLOTTE)
 Telephone: (704) 588-8880
 Email: charlotte@supplynet.com

NORTH CENTRAL REGION

Viking SupplyNet (DETROIT)
 Telephone: (586) 754-0004
 Email: detroit@supplynet.com

Viking SupplyNet (CHICAGO)
 Telephone: (630) 462-5860
 Email: chicagocsr@supplynet.com,
chicago@vikingfabrication.com

Viking SupplyNet (TWIN CITIES)
 Telephone: (651) 455-0325
 Email: stpaul@supplynet.com

Viking SupplyNet (COLUMBUS)
 Telephone: (614) 527-5800
 Email: midwest@supplynet.com,
vfscolumbus@supplynet.com

SOUTH CENTRAL REGION

Viking SupplyNet (AUSTIN)
 Telephone: (512) 888-9850
 Email: austin@supplynet.com,
vfsaustin@supplynet.com

Viking SupplyNet (HOUSTON)
 Telephone: (713) 896-8464
 Email: houstonvsn@vikingcorp.com,
vfs-houston@supplynet.com

Viking SupplyNet (DALLAS)
 Telephone: (972) 466-0933
 Email: dallas@supplynet.com,
vfsdallas@supplynet.com

Viking SupplyNet (SAN ANTONIO)
 Telephone: (877) 684-5464
 Email: sanantonio@supplynet.com

Viking SupplyNet (KANSAS CITY)
 Telephone: (816) 474-1190
 Email: kansascity@supplynet.com,
vfskansascity@supplynet.com

WEST REGION

Viking SupplyNet (PHOENIX)
Telephone: (602) 252-0400
Email: phoenix@supplynet.com,
vfsphoenix@supplynet.com

Viking SupplyNet (SEATTLE)
Telephone: (253) 872-8444
Email: kent@supplynet.com

Viking SupplyNet (DENVER)
Telephone: (303) 576-0665
Email: denver@supplynet.com,
vfsdenver@supplynet.com

Viking SupplyNet (LOS ANGELES)
Telephone: (562) 903-7274
Email: santafesprings@supplynet.com

Viking SupplyNet (BAY AREA)
Telephone: (510) 429-7295
Email: hayward@supplynet.com,
vfhayward@supplynet.com

Viking SupplyNet (RIVERSIDE)
Telephone: (951) 656-3111
Email: west@supplynet.com,
vfsriverside@supplynet.com

Viking SupplyNet (LAS VEGAS)
Telephone: (702) 795-8002
Email: lasvegas@supplynet.com

CANADA

Viking SupplyNet
(Alberta, Saskatchewan, Manitoba,
N.W. Territories)
Telephone: (866) 703-5681
Email: calgary@supplynet.com

Viking SupplyNet (B.C. and Yukon)
Telephone: (866) 600-3473
Email: vancouver@supplynet.com

Viking SupplyNet
(Ontario, Manitoba, New Brunswick,
Nova Scotia, Prince Edward Island,
Newfoundland)
Telephone: (866) 670-3550
Email: toronto@supplynet.com

SCS Canada (Quebec)
Independent Distribution Partner
Telephone: (450) 430-7031
Email: scs@polygon.ca

Mexico and Latin America
Viking SupplyNet (Dallas)
Telephone: (972) 466-0933
Email: latinamerica@supplynet.com

Viking SupplyNet (Ft. Lauderdale)
Telephone: (954) 791-2901
Email: latinamerica@supplynet.com

Watts

815 Chestnut Street
North Andover, MA 01845
Tel: 978.688.1811
Fax: 978.794.1848
www.watts.com

Founded:
1874

Management:
Ken Nolan, National Product Manager

Company Profile:

Watts, part of the Watts Water Technologies family, is one of the world's largest independent valve companies with 10 factories in the United States and Canada. Watts Regulator designs, manufactures, and sells an extensive line of flow control products for the water quality, residential plumbing and heating, commercial and OEM markets.

Wheatland Tube Company

700 S. Dock Street
Sharon, PA 16146-1836
Toll Free: 800.257.8182
www.wheatland.com

Founded:
1877

Primary Products/Services:

Tubular steel products, electrical conduit, steel sprinkler pipe, fence framework, standard pipe

Market Area:
Nationwide

Hours:
7:00 am -5:00 pm 7 days

Management:
Barry M. Zekelman, Exec. Chair & CEO
Kevin Kelly, Pres, Wheatland Tube, Pipe Division
Bob Bussiere, Technical Consultant

Sales Contact:
Scott Dimmick, Southeast Regional Manager
Email: scott.dimmick@wheatland.com

Company Profile:

Wheatland Tube manufactures the industry's most complete line of steel sprinkler pipe. Our coating options set the standard for resistance to exterior corrosion and heat. With a complete line of fire sprinkler pipe, we guarantee our steel pipe

is compatible with any fire protection system that only uses steel pipe. The Wheatland Advantage is dedicated to providing our customers with an unparalleled product, our fire sprinkler pipe is:

- 100% Steel
- Made in USA
- Hot-dipped galvanized to prevent dross and ensure a smooth ID finish
- Exclusively double-sealed and packaged for shipping



WinSupply, Inc.

3110 Kettering Blvd.
Dayton, OH 45439
Tel: 937.294.5331
Toll Free: 800.677.4380
www.winsupplyinc.com

Sales Contact:

Bob Lopuzzo, V.P. Fire and Fabrication
Email: rdlopuzzo@windustrial.com

Company Profile:

As part of the national wholesale distribution company WinSupply Inc., local Winsupply fire fabrication and supply companies specialize in wholesale distribution of fire sprinkler industry products. From facilities throughout the country, the Winsupply family of fire companies provide fire sprinkler contractors with customized fire sprinkler system fabrication and a wide range of the fire sprinkler industry's most recognized and relied upon brands. With a sharp focus on personalized service, the Winsupply family of fire companies have the expertise to be knowledgeable about the products they sell as well as the technical requirements of their customers.

NEWBURGH WINDUSTRIAL
Newburgh, NY - 845.566.5300

ATLANTA WINSUPPLY
Lithonia, GA - 770.484.1112

DAYTON WINDUSTRIAL
Dayton, OH - 937.461.2603

ROCHESTER WINDUSTRIAL
Rochester, NY - 585.232.6770

PITTSBURGH WINSUPPLY
Pittsburgh, PA - 412.331.2182

LEHIGH VALLEY WINDUSTRIAL
 Bethlehem, PA - 610.866.1751

CAPITOL HEIGHTS WINSUPPLY
 Walker Mill, MD - 240.619.2472

NEWARK WINDUSTRIAL
 Newark, NJ - 973.589.0479

NYC WINSUPPLY
 NYC City, NY - 516.280.9384

NEW HAVEN WINDUSTRIAL
 New Haven, CT - 203.248.0400

NORTHERN WINDUSTRIAL
 Newington, CT - 860.953.9321

WEST COAST WINSUPPLY
 Tampa, FL - 813.247.7202

LITTLE ROCK WINWATER
 Little Rock, AR - 501.455.5315

ALBUQUERQUE WINDUSTRIAL
 Albuquerque, NM - 505.821.2400

WINSUPPLY OF DENVER
 Denver, CO - 720.459.8776

TEMPE WINSUPPLY
 Tempe, AZ - 410.219.6562

CRANSTON WINDUSTRIAL
 Cranston, RI - 401.941.8370

BATON ROUGE WINDUSTRIAL
 Baton Rouge, LA - 225.753.2940
 MECHANICSBURG NOLAND
 Mechanicsburg, PA - 717.796.1796

STAMFORD WINDUSTRIAL
 Stamford, CT - 203.363.2700

ZCL/Xerxes

7901 Xerxes Avenue South
 Minneapolis, MN 55431
 Tel: 403.828.4147
www.zcl.com



Zurn Wilkins

A Zurn Water Solutions Company
 1747 Commerce Way
 Paso Robles, CA 93446
 Tel: 855.663.9876
 Fax: 805.237.7197
www.zurn.com

Founded:
 1906

Primary Products/Services:

Valves and backflow preventers for fire suppression systems

Market Area:

Worldwide
 Hours: 5:15 am - 5:00 pm M-F

Management:

Michael Hynes, General Manager
 David Krohn, Vice President, Marketing
 Will Allgood, Director of Sales, Fire Protection
 John Mankins, Product Manager, Water Safety & Control

Sales Contact:

Mike Mallas, National Sales Manager
 Tel: 206.794.2059
 Email: mike.mallas@zurn.com

Company Profile:

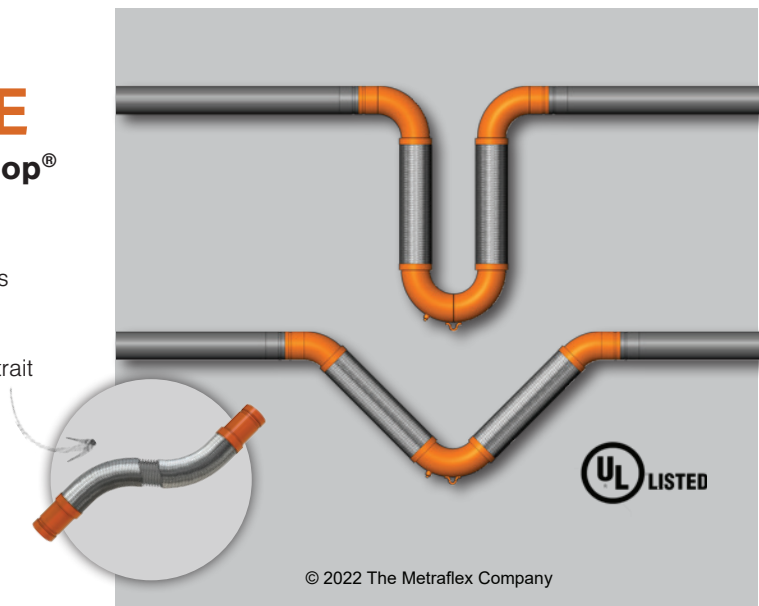
Zurn Wilkins, a Zurn Water Solutions Company, offers fire protection system components, including backflow preventers, pressure reducing fire valves, pilot-operated control valves, shut-off & check valves, grooved fittings, and other fire protection equipment that work in tandem to protect against fire. Available in angle and inline patterns, threaded, flanged, and grooved connections covering 1/2" – 12" sizes. Their fire protection products work together and always meet compliance, so you'll gain peace of mind, yet save some time.

DESIGNED TO HANDLE THE PRESSURE

Introducing High Pressure **HP FireLoop®** & **FireVoop** Expansion Joints

- Standard Fireloops and FireVoops now have **300 psi** rating extended through larger diameters
- UL Listed at **300 psi** for all movements, up through 6" diameter
- High pressure option also available for the FireStrait flexible connector with carbon steel end-fittings

Metraflex
for pipes in motion
FIRE PROTECTION DIVISION
www.Metrafire.com • 1-855-FIRELUP



© 2022 The Metraflex Company



FIRE PROTECTION

WE'RE ALL ABOUT

Efficiency

Whether it's state-of-the-art fabrication, an extensive product offering or expert advice, you can always count on the fire protection professionals at Core & Main to find a solution that lasts.

A Leading Distributor of Fire Protection Materials & Fabrication Services.

We've got your back.



SCAN ME

Local Service, Nationwide®

coreandmainfire.com

It is a Question of Flow

by Vince Powers, *Inspection, Testing and Maintenance Specialist*



NFPA 25, Standard for Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems is the minimum requirement for properly maintaining fire protection systems. Not everything in NFPA 25 is based on a pass or fail criteria. It is like a comparison document, specifically when we talk about flow testing. When a flow test is conducted, the results are compared to previous results and the

original acceptance test, so that we can determine how the system performs now as to the day it was installed. This includes tests such as main drain, standpipe, and fire service mains.

Most of these tests have been required since the inception of NFPA 25 in 1992. However, until recent years they were not completed and in some cases are still not being completed today. In this article we will explore chapter by chapter what common flow tests are required and the frequencies at which they are required. When conducting these tests, ensure that you read the requirements of the specific edition of NFPA 25 adopted in your jurisdiction as the requirements can be different from edition to edition. This article will focus on the 2020 edition of the standard.

To begin we will look at the definition of test and testing. This may be a little confusing, but in NFPA 25, there are separate definitions for test and testing. Section 3.3.47 defines test as an operation to verify the function of a device, such as a waterflow alarm. Section 3.3.48 defines testing as a procedure to determine the operational status of a component or system and has an annex note stating that testing is performed to follow up on the original acceptance test at specified intervals.

Chapter 6—Standpipes

Section 6.3.1 requires a flow test of all automatic standpipe systems every five years. As stated earlier, verify the requirements of the edition being used. For instance, in 2011, all automatic systems are to be tested. In 2014, all class I and III systems, including manual systems, are to be tested. In 2017 the requirement was changed back to automatic standpipes only.

The requirement for the test is to flow a minimum of 500 gpm at the most hydraulically remote standpipe connection while flowing 250 gpm at each additional standpipe simultaneously, until system demand is met. This maximum system demand is not what is noted on the hydraulic nameplate but is based on if the building is sprinklered or not. If the building is protected throughout in accordance with NFPA 13, it shall have a maximum flow rate of 1000 gpm and 1250 gpm if not protected throughout, in accordance with

NFPA 13 If the building is fully protected in accordance with 13R, *Standard for Installation of Sprinkler Systems in Low Rise Residential Occupancies*, the demand is 1250 gpm. Understand that this is max gallon per minute and the minimum is 500 gallons per minute. An example would be a sprinklered building with two standpipes would require a total flow of 750 gallons per minute. 500 gpm from the most hydraulically demanding standpipe and an additional 250 gpm from the second standpipe for a total of 750 gpm. The other criteria to be met for system demand is to record residual pressure. Section 6.3.1.4 requires system demand to include flow and pressure, based on the edition used at the time of installation.



This is sometimes hard to determine, specifically if the original installation and acceptance test documents are not available. As a rule of thumb, the flow listed previously has been required for many decades with a residual minimum pressure of 100 psi, at the most hydraulically remote hose connection. The 100-psi residual pressure requirement came about in 1993, prior to the 1993 requirement, the minimum residual pressure was 65 psi. Following is a list of requirements that was compiled a few years back. Again, this is a rule of thumb, and you should always consult with your local AHJ to verify the flow and pressure requirements when conducting these tests. (*see standpipe flow test requirements on next page.*)

Chapter 7— private fire service mains

Section 7.3.1 requires a flow test of the private fire service main at five-year intervals. Many in the industry relate this to a fire hydrant test. This is not the case. In fact, there are no flow test requirements for fire hydrants in NFPA 25. There is an annual test of the hydrant just to operate the hydrant and flow water to ensure there is no debris, but no measurements are required, thus not making this a

continued on page 54

continued from page 53

STANDPIPE FLOW TEST REQUIREMENTS

1930s	2 ½" hose outlets. 1 ½" only	250 gpm per riser to a max 500 gpm at 50 psi res. 100 gpm with 25 psi residual
1940s	2 ½" hose outlets 1 ½" hose outlets	250 gpm per riser to a max 500 gpm at 50 psi res. 70 gpm with 25 psi residual
1950s	2 ½" hose outlets 1 ½" only	250 gpm per riser to a max 500 gpm at 40 to 50 psi. 70 gpm with 12 to 25 psi residual
1960's	2 ½" hose outlets 1 ½" only	250 gpm per riser to a max 500 gpm at 40 to 50 psi. 70 gpm with 12 to 25 psi residual
1970s	2 ½" hose outlets 1 ½" only	500 gpm for first riser and 250 gpm for each additional riser to a max of 2500 gpm at 65 psi residual. 100 gpm with 65 psi residual
1980s	2 ½" hose outlets 1 ½" only	500 gpm for first riser and 250 gpm for each additional riser to a max of 2500 gpm at 65 psi residual. Exception fully sprinklered light hazard occupancies have a max of 1500 gpm and fully sprinklered ordinary hazard occupancies have a max of 2000 gpm at the 65 psi residual. 100 gpm with 65 psi residual
1990s	2 ½" hose outlets 1 ½" hose outlets	500 gpm for first riser and 250 gpm for each additional riser to a max. of 1250 gpm. If combined in a fully sprinklered building the max flow rate is 1000 gpm with 100 psi at topmost outlets. 100 gpm with 65 psi at top outlet.

Note: 1993 was the year that residual pressures changed from 65 psi to 100 psi.

2000	2 ½" hose outlets 1 ½" hose outlets	500 gpm for first riser and 250 gpm for each additional riser to a max. of 1250 gpm. If combined system, the flow rate will be whichever is greatest. Fully sprinklered rate will not exceed 1000 gpm at 100 psi. 100 gpm with 65 psi at topmost outlet
2003	same as above	
2007	same as above	

flow test. However, every five years the fire service main must be flow tested. This is where static and residual pressures are recorded and compared to previous tests. This is one of the only flow tests that do not need to be compared to the acceptance test. Section 7.3.1.1 states that any degradation in the results is to be investigated to the full satisfaction of the Authority Having Jurisdiction (AHJ). Another subtle change that occurred in the 2017 edition in Section 7.3.1 is that the language previously stated the flow test was only for fire service mains that served hydrants. The words *servicing hydrants* were removed, now requiring all private fire service mains to be flow tested.



There is a new requirement in the 2020 edition of NFPA 25, 7.2.2.6.5 to flow test dry hydrants with an approved pump to verify that the minimum design flow is maintained. These are different from a dry barrel hydrant; these hydrants are used by the fire service for drafting water from water supplies such as ponds or cisterns.

Chapter 8-Fire Pumps

Section 8.3 is where we find the testing requirements for fire pump assemblies. There are two tests required for fire pump. First is the churn test, which is required weekly or monthly depending on the type of pump and other exceptions as outlined in Section 8.3.1.2.1 requiring electric driven pumps to be churn tested weekly. The second test is the annual flow test. This is where we test the performance of the fire pump assembly, as well as detect water supply issues. We are required to compare the test results to the nameplate of the fire pump, as well as the original acceptance test.

For a full procedure for flow testing and other ITM requirements for fire pumps can be found in an *NFSM* article for MAR/APR 2022. You can access the issue in our community library after logging in at our website.

continued from page 54

There are no flow testing requirements for chapter 9, water storage tanks. For chapter 10, water spray fixed systems, chapter 11, foam water systems, and chapter 12, water mist systems, all have many test and testing requirements however, we are not going to explore them in this article as each of these chapters should be an article unto their own.

Chapter 13-Common valves, and components

There are many flow testing requirements throughout this chapter. 13.3.2 main drain testing. Main drain tests are required annually unless a backflow or main pressure reducing valve is installed, then the testing requirement is quarterly. We are to compare the residual results to previous and acceptance test results. There cannot be more than a 10% reduction in full flow residual pressure as compared to the original acceptance or previously performed tests.

13.4.3.2 preaction testing. Preaction valves are required to be trip tested annually to exercise the valve. Once every three years, the preaction valve is required to be fully flow tested. If the preaction valve protects a freezer, then measures need to be taken so not to introduce moisture into the piping in the freezer. For double interlock preaction systems, a water to outlet or inspector's test connection must be recorded.

13.4.4.2 deluge system testing. Deluge systems are required to be fully flow tested annually. A gauge must be placed at the most remote nozzle and the pressure at the

gauge must be compared with the system gauge while flowing, to ensure the original design is met by the water supply.

13.4.5.2 dry system testing. Like preaction valves, the dry pipe valve is required to be trip tested annually to exercise the valve. Once every three years they are required to be full flow tested.

13.5 pressure reducing and relief valves. There are several types of pressure reducing and pressure restricting devices in this section and they all need to be exercised annually and full flow tested every five-years. For pressure reducing valves, the recorded pressures shall be compared to the original acceptance tests.

13.7 backflow preventers. In accordance with NFPA 25, there is no requirement for the annual backflow test. This test is usually required by the water authority. However, there is a requirement to conduct a forward flow test in accordance with Section 13.7.2, which requires water to be flowed through the backflow of at least system demand to ensure the backflow check valves are operating properly and opening enough to allow system demand past the backflow valve.



This was a brief overview for flow testing requirements of NFPA 25. The NFPA 25 handbook has step-by-step procedures for conducting these tests. It is always important to understand the operation of each type of system and to understand the results from each test. Conducting testing on these systems without comparing the results to previous, and especially the acceptance test results, does no one any good. It is the same as not testing the system at all. •



Virtual Reality Reveals the Speed of Fire and the Power of Fire Sprinklers

Exposure to home fires puts responders at risk from fire, collapse and health hazards. Each new home built without home fire sprinklers makes the community less safe for all.

With HFSC's new virtual reality video you can help decision makers, stakeholders and others in your community understand what you know all too well: today's home fires are fast and deadly.

With user-controlled 360-degree full-room views, they'll experience actual house fires in virtual reality, feeling as if they are in the rooms. They'll see flashover in the unsprinklered room in

real time and watch a sprinkler automatically control the blaze in another.

This new resource lets you share your knowledge with convincing evidence of the need to protect new housing stock with sprinklers. It can be watched with 3D glasses/headset for an immersive experience or in 2D on HFSC's website.

Installed home fire sprinklers support Community Risk Reduction. Our new virtual reality video is an effective resource to help you achieve your CRR goals.

Visit HomeFireSprinkler.org/VR.



Scan this QR code with your smartphone to learn more.



NFSA Hits the Road with Virtual Reality Side-By-Side Burn Kits

by Suzanne Mayr, [NFSA Northwest Regional Manager](#)

Our local city council is ready to consider a fire sprinkler requirement. As an advocate, you want to reinforce how fast sprinklers work to provide occupants time to escape. What do you do? Often, the answer would be to conduct a live side-by-side burn demonstration, highlighting the differences between a sprinklered and unsprinklered room and what that means to potential victims, firefighters, and city resources.

Live demos can be challenging if there is a burn ban due to wildfire danger or poor air quality, poor weather conditions, lack of funding, staffing and fire-fighting equipment.

The Home Fire Sprinkler Coalition (HFSC) has a solution: a Virtual Reality (VR) flashover and sprinkler demonstration. With the help of NFSA staff, the HFSC shot a VR video with ability to show a 360° panorama of two identical rooms burning—one with a home fire sprinkler, the other room without a sprinkler. Viewers experience the fires as if they were inside the burning house, including hearing the fire crackle and smoke alarms activate. In the sprinklered room, the “whoosh” of the sprinkler activation with the water spraying can be experienced. The video allows a user to stand in the rooms after the fire, surveying the damage—or in the case of the sprinklered room, the corresponding lack of damage.

HFSC worked with a VR training specialty company out of England to develop the kits with funding from State Farm and FEMA. Up to 15 users can watch the presentation at the same time, with an option to tailor the presentations by adding features such as PowerPoint slides with local fire stats. For events such as conference expos, the videos can be viewed individually on each headset, facilitating walk-up viewers. HFSC will soon offer fire departments a lower-tech, cost-effective way to use the 3D video at open houses with the public, having the viewers watch the video on their own cell phones using collapsible rubber 3D glasses.

As part of a FEMA funded program, five state-of-the-art VR kits were purchased and are now being used and evaluated across the United States, managed by HFSC, NFPA and NFSA staff.

Lorrell Bush, Executive Director of the Florida Fire Sprinkler Association, is managing one of the kits. She has taken the show on the road from the Florida panhandle all the way to Daytona. More than 250 people have experienced the virtual reality fires at several fire sprinkler industry board meetings and conferences. The initial goal is to show the industry how this tool works, and to gather input on how to best utilize this tool to advocate for home fire sprinklers.

Lorrell’s next stop is the Future Builders of America camp in

Haines City, Florida. There she will be able to interact with about 100 high school students from across the state who are interested in a career in the building trades. Lorrell hopes to show future contractors and tradespeople that fire sprinklers are life-safety systems, and to teach them the facts about how fire sprinklers work.

“This is a great way to show people exactly why fire sprinklers are so important and why we are so passionate about why we do what we do,” Lorrell said.

Erik Hoffer, Executive Director of the Northern Illinois Fire Sprinkler Advisory Board, was a natural choice to manage one of the VR kits. Before he came to NFSA, he worked with Peg Paul and Associates, the engine behind the Home Fire Sprinkler Coalition. In Illinois, more than 100 local jurisdictions have passed fire sprinkler requirements, and each day more jurisdictions consider such an ordinance.

“Having this virtual reality video and the headsets will add another important educational tool to our toolbox in the field as we work with community officials to understand the dangers of today’s home fires and the need for fire sprinklers in all building.”

“Having this virtual reality video and the headsets will add another important educational tool to our toolbox in the field as we work with community officials to understand the dangers of today’s home fires and the need for fire sprinklers in all building,” Erik said. “While we can’t expect them to know exactly what it’s like to physically stand in a room on fire, this immersive experience can offer them a startling view of how little time it takes for fires to become deadly. More importantly, it shows how quickly a fire sprinkler springs into action to prevent destruction,” he added.

Erik has scheduled VR demos at an NFSA Chapter meeting, the Fire Inspectors Association of Indiana conference, and the Illinois Fire Inspectors Association.

As an active member of both the Washington and Oregon Residential Fire Sprinkler coalitions, I volunteered to be the keeper of the kit for the Northwest. So far, I have scheduled events in not only the two states with active residential sprinkler coalitions, but also in Montana, Alaska and Idaho.

continued on page 58

continued from page 57

My trial run was with the Spokane Valley Fire Department, giving Chief Greg Rogers' prevention team the first crack at the final product he had envisioned years ago. Chief Rogers has been a longtime vocal advocate for residential fire sprinklers in Washington and in national forums such as the ICC and fire service groups.

After working out a few rough spots, I then debuted the system at the Idaho Building Officials Spring Education Institute and followed with the Alaska Fire Chiefs conference. A full spring schedule across the Northwest has my virtual dance card full! The Washington Fire Chiefs Association, the Oregon Fire Marshals Association, the Montana Codes Conference, and the Oregon Fire Chiefs Association are just a few of the venues we'll be showcasing this tool. As more fire sprinkler advocates learn about the virtual side-by-side option, my hope is they will help get the demos in front of policy-makers.

I am particularly excited to work with local jurisdictions in Washington state and have already fielded inquiries from several that are considering a fire sprinkler ordinance. Like Illinois, Washington jurisdictions may adopt fire sprinkler requirements without going through the State Building Code Council or legislature. So far, ten jurisdictions have zero square foot requirements, with several requiring sprinklers in larger structures. The state also requires sprinklers in townhouses with five or more units, with several jurisdictions such as Seattle and Tacoma requiring fire sprinklers in all townhouses.

Like traditional side-by-side burns, this tool provides compelling evidence that fire is fast, deadly, and destructive...and that sprinklers are fast, lifesaving and effective. It gives me an innovative way to engage stakeholders, and I am hoping it may make the difference between a policymaker voting for a fire sprinkler requirement or deciding fire sprinklers are not necessary.

If you have a group of policymakers that would benefit from experiencing a virtual side-by-side burn, please reach out to the Home Fire Sprinkler Coalition. Our goal is to increase the number of home fire sprinkler systems installed in the U.S., eventually reducing tragic fire loss. •



Jon Marsh, Fire Chief of Western Emergency Service Area serving Anchor Point and Nimitchik, gives the virtual reality side by side burn a spin at the Alaska Fire Conference in Anchorage. The goal is to let jurisdictions know this tool is available for fire sprinkler advocacy.



Attendees at an NFSA event in Daytona Beach Shores experience a fire in 3D, both in a sprinklered and unsprinklered room. Viewers can "walk" around the room after the fire, comparing fire damage in both rooms.



Wandering in Where I Didn't Belong?

When looking to expand NFSA's social media presence, I often look for groups to join that are related to the fire sprinkler industry. Imagine my delight (and slight trepidation) as NFSA was accepted into the *Non-Union Fire Sprinkler Fitters Group* on Facebook! With over 10,000 members, the group was a great place to find

new fire sprinkler advocates to help support our mission, right?

I must admit that I really wasn't surprised that once I started posting as NFSA, the comments on the post were less than welcoming. I knew the misconceptions many fitters held about NFSA...and I heard them all in the comments on my first group post: "They're a union association" "All their members are union contractors" "They don't like open shop contractors," yep, I heard them all. And so, controlling my exasperation, frustration, and my New York temper, I waited a couple of days and posted once more. Not preaching, just stating the facts: "NFSA is comprised of both union and open shop members. Open shop contractors sit on our Board of Directors. About 40% of our contractor members are open shop." And then...silence. No negative comments, but no comments at all.

I might mention that the group is very active. Members post



regularly, mostly about bad installations (you should join and take a look at some of the photos!) So, what to post that would engage the group?

Thanks to our members, I am provided with many images of sprinkler saves and the stories that don't get published in the media of "the fire that wasn't." So, armed with fresh ammunition and a new approach, I went in again. No news story, no canned text, just a photo of a sprinkler save and a quote by the fire department about the difference fire sprinklers made in the fire. I waited...and waited. I stopped checking the page at 10:00 pm. The next day, I checked my Facebook notifications. 15 people had shared the post. When I went in to check on who shared, I was thrilled to see that many of the shares were from the non-union group. The comments on some of the posts from the group were even better!

"Thanks for the reminder – this job is worth more than just a paycheck!"

"They do work!"

"Makes me proud of what I do."

I hit payday! That post was shared by several members of the group, and 44 others liked and shared from there. Several members of the group took the time to follow the NFSA Facebook page and continue to do so today. Finding that common ground was extremely satisfying. To know that pride in our industry can transcend perceived notions of differences among us is an extremely valuable tool.

In closing, may I just say how proud I am to be part of an inclusive association, one where all industry voices are heard, one where all contractor and SAM members are welcomed to sit on our Board and help guide NFSA into the future. I hope all members take advantage of the opportunities NFSA affords you. This association is comprised of the best the industry has to offer, and my thanks goes to our members, who truly make it so. •

Joanne

Compufire

Call us today at 877-213-6696



YES! WE HAVE THAT!

Fire Water Storage Tanks

Corrugated, bolted, steel, above ground,
fiberglass underground

www.firewaterstorage tank.com

Contractor, Designer, RMA and RME

Confidential Services

Let us assist you with Fire Protection Licensing

www.fireprotectionlicenses.com

Fire Pump Parts

Available for most manufacturers
Quick, accurate delivery of packing and repair kits

www.firepump parts.com

Fire Pump Controller Replacement

Electric, diesel, and jockey

www.firepumpcontrollerreplacement.com

Fire Pump House Packages

Pre-piped/wired skid and houses
Save time and money with a complete package

www.pumphousesystems.com

NFSA Election Results



Newly Elected Board Officers: l. to r.: James Golinveaux-Viking, Vice Chair; Shane Ray, President; Jim Boulanger-Patriot Fire Protection, Chair; Vickie Pritchett, VP/Executive Officer; Zarko Ognjenovic-MJ Wood, Treasurer. Officers Not Present: Fred Barall, Senior VP and General Counsel; Jeff Hugo, VP of Codes, Standards and Public Fire Protection

NFSA BOARD MEETING

A big thank you goes to all of our NFSA Board, Council, and Committee members for their participation and service. We met in-person, in March at the JW Marriott/LA Live in Los Angeles, California and what a great schedule of meetings!

Congratulations goes to our newly elected NFSA Board Officers. Outgoing Chair Kent Mezaros purchased a football that he and outgoing Treasurer Bruce LaRue signed to pass to Jim Boulanger, incoming Chair and President of Patriot Fire Protection in the Pacific Northwest, with instructions not to “drop the ball.”

“Member involvement is what makes NFSA strong, and we are blessed to have so many dedicated members serving our Association. We were also happy to see so many Los Angeles Area contractors and suppliers join us for our member reception. Working together, we can expand our efforts to create a stronger industry and a safer world.” NFSA President Shane Ray stated. •

LinkedIn®

Did you know NFSA's LinkedIn Group has more than 10,500 members? It's a great place to showcase your products and services.

Search **"National Fire Sprinkler Association"** in **"groups"** and join today!

Capital Region



The Capital Region Fire Sprinkler Association (CRFSA) kicked off the 2022 Developed for the Inspector series to a full house. A special thanks to the University of Maryland-MFRI for hosting the event, Maryland State Fire Marshal Brian Geraci and Rich Kozel of Livingston Fire. The daylong event was a big success, and we want to thank our presenters, Past CRFSA Chair Terry Victor, JCI, Ed O'Brien FPC, John Walser Fairfax Co. Va. Fire and Rescue and Aaron Smith Montgomery County MD.



Minnesota

Steve Mosborg Recognized by the Minnesota Chapter

Steve Mosborg was recently recognized by the Minnesota Chapter for his presentation at a December 2021 media event on Holiday Fire Safety. Steve survived a near fatal fire on Christmas Day 2000. He provided media representatives a powerful narration of the events and the mistakes that nearly led to his death. His advice to “get out and stay out” added to other fire safety messages provided by the Lino Lakes Public Safety Department, the State Fire Marshal Division, and NFSA’s side-by-side demonstration involving holiday decorations. Joel Hewitt, NFSA Local Minneapolis Coordinator, authored the award and the presentation to Steve for the courage to tell his story and help others prevent and survive home fires.



Minnesota Chapter Donation Promotes Regional Firefighter Training Efforts



Minnesota Chapter members toured the Bloomington, MN Fire Station at the March Chapter meeting. Bloomington Fire Assistant Chief Laura McCarthy and Battalion Chief Kris Kaiser provided a tour and highlighted the recent upgrades in their sprinkler training area. Using a \$6,000 grant from the Minnesota Chapter, donations of equipment from Tyco and labor from JCI, and a group of dedicated firefighters from the station, the Department upgraded the original training props that had been installed in the early 1990s. The system now includes working wet and dry systems, upgraded alarms, and a live-burn demonstration area. The tour of the training area included a live-fire burn of a residential sidewall sprinkler. The sprinkler activated and extinguished the fire in just 35 seconds. The training props are used by several fire departments around the region to train on-duty firefighters and firefighter academy classes in sprinkler operations and fire department responses to sprinkler-controlled fires.



Battalion Chief Kris Kaiser Demonstrating the Operation of the Newly-Remodeled Training Props

Northwest Chapter News

The Columbia-Willamette and Puget Sound NFSA chapters are looking forward to a full schedule to round out 2022. Chapter member should log on to the chapter pages on the NFSA website or check their inbox for details on upcoming meetings, including a vendor showcase, a visit with NFSA President Shane Ray, and the annual Fire Marshal Roundtable.

continued on page 62

CHAPTERS IN ACTION

continued from page 61

Florida

Daytona Beach Shores Training

The FFSA completed training in Daytona Beach Shores for over 150 Water-based Inspectors and 60 Contractor I & II license holders. It was a great event with rave reviews. The week included classroom style sessions with the industry's top experts leading our classes as well as interactive stations with fun activities in a learning environment. The vendor support was amazing, and the participants had fun while learning. Thank you to our vendors!



Rebecca Booker Recipient of 2022 Dr. Anne W. Phillips Award for Leadership in Fire Safety Education

The Congressional Fire Services Institute (CFSI) and the International Fire Service Training Association/Fire Protection Publications/Oklahoma State University are proud to announce that **Rebecca Booker** is the recipient of the 2022 CFSI/IFSTA Dr. Anne W. Phillips Award for Leadership in Fire Safety Education. The award recognizes individuals for outstanding achievements at the national level in fire safety education. The award presentation will be on April 7th at the 32nd Annual National Fire and Emergency Services Dinner in Washington, DC.

Ms. Booker served 20 years as a certified Fire and Life Safety Educator, an arson investigator, and a certified firefighter I at the Spring Lake Park-Blaine-Mounds View (SBM) Fire Department in Blaine, Minnesota (MN).

Among her important contributions to fire safety education, Ms. Booker helped develop the Home Safety Survey (HSS) program as part of SBM's Community Risk Reduction (CRR) efforts. HSS is a voluntary home inspection program that looks for potential fire, injury and crime hazards while offering solutions. Ms. Booker personally completed nearly 4,000 home safety surveys while she trained and guided colleagues across the country to complete many more. In addition, she helped establish a New America Academy in Minnesota that provides fire safety education for culturally diverse and immigrant communities.

Tim Anderson Appointed as President of Valcom

Valcom, a division of Potter Electric Signal Company, LLC, has announced that **Tim Anderson** joined the company and will serve as its next president. Anderson succeeds Jack Mason, who established Valcom over 40 years ago, and will continue on as the executive advisor.



Anderson has over 25 years of strategic and general management experience in diverse industries including enterprise communications, medical devices, diagnostics and life-safety communications. Anderson held executive level positions at Johnson and Johnson, Quest Diagnostics, Beckman Coulter, and most recently at Rauland, where under his leadership and strategic vision, the company experienced rapid growth, entry into adjacent markets and expansion into software platforms.

Viking Group, Inc. President & CEO James Golinveaux Elected National Fire Sprinkler Association Vice Chair

James Golinveaux, President & CEO of Viking Group, Inc., was recently elected Vice Chair of the National Fire Sprinkler Association (NFSA). The NFSA Board of Directors includes leaders from throughout the sprinkler industry, including fire sprinkler contractors, fire sprinkler manufacturers, and other professionals. They provide clear guidance and insight to allow NFSA to fulfill its mission.



“Throughout my career I have admired the work of the NFSA and their mission,” says Golinveaux. “It’s an honor to serve in this capacity alongside an outstanding group of leaders from different facets of the industry. Together we will continue to build a stronger industry and a safer world.”

Golinveaux has 40 years of experience in the fire protection industry and has been an active participant on many committees, boards, and councils. He has been a member of the National Fire Protection Association (NFPA) and was a member of the NFPA 13 Technical Committee for over 22 years. In addition to his contributions to various NFPA committees and task groups, Golinveaux is the current chair of the NFPA Standards Council.

To learn more about Viking, visit www.vikinggroupinc.com.

NFSA is excited to announce that we will be hosting our **2022 Annual Seminar and Business & Leadership Conference Sept 28-30, 2022**, at Sheraton Sand Key in beautiful Clearwater Beach, FL.



You won't want to miss this event! The Sheraton Sand Key boasts 13 acres of private white sand beach and warm gulf waters!

Stayed tuned for more details and mark your calendars!



SPRINKLERING OF NEWS

■ Zurn Launches New 500XL3 Pressure Reducing Valve

Zurn Industries, LLC announces the release of the new Zurn Wilkins 500XL3 Pressure Reducing Valve. The new Zurn Wilkins 500XL3 Pressure Reducing Valve (PRV) has a patented integral venturi enabling the valve to have best-in-class flow performance. It also has the shortest lay length and is the most compact PRV on the market for increased design versatility and easier drop-in installation.

The new valve's all-bronze body, stainless-steel stem, and corrosion-resistant cartridge internals withstand heavy wear and harsh environments. The Zurn Wilkins 500XL3 is available in six sizes from 1 inch to 3 inches and with multiple universal connection options, including single union, double union, female thread, and flanged.

The Zurn Wilkins 500XL3 meets lead-free environmental requirements and meets the requirements of NSF/ANSI 61 and is ASSE listed 1003, IAPMO listed, and CSA certified. Learn more about the new Zurn Wilkins 500XL3 and Zurn's complete line of pressure reducing valves at Zurn.com.

■ Zurn Water Solutions and Elkay Manufacturing to Combine

Zurn Water Solutions Corporation and Elkay Manufacturing Company announced they have reached a definitive agreement to combine the businesses in an all-stock transaction. Upon completion of the transaction, Zurn Water Solutions shareholders will own approximately 71% and Elkay shareholders will own approximately 29% of the combined and newly named company – Zurn Elkay Water Solutions Corporation.

■ New VXR Dry Pipe Valve is Lighter and Smaller, Features External Reset Capability

The Viking Corporation announced today the new VXR valve offering available for installation in dry pipe systems. The new externally resettable, latching differential valve, which is available with groove-by-groove connections with sizes ranging from 2 ½ to 6 inches, also features a lower weight and smaller footprint.

The new FM-Approved and cULus Listed valve features a convenient reset located on the bottom of



the valve body to easily release the clapper after activation. VXR combines a clapper and air plate assembly with a differential air-to-water seat design. The differential valve design is used to separate the water supply from the dry pipe sprinkler system. Additionally, the design allows an air / nitrogen supply of moderate pressure to control a higher water supply pressure.

VXR dry pipe valves are designed to operate a water motor alarm and/or an electric pressure alarm switch. The Viking Model D-2 Accelerator can be used to speed the operation of the valve on large capacity systems, or where faster action is required. The VXR is offered with multiple trim options such as loose trim, modular trim, pre-trimmed (includes standard trim only), and PTR pre-trimmed riser, which includes the standard trim, pressure switches, water supply control valve and coupling, all installed.

Viking's Valve and System Configurator (<https://webtools.vikingcorp.com/valveconfig>) offers users the opportunity to save time when building a system riser digitally, while generating a complete system and materials list for project needs.

To learn more about Viking's new VX line or explore all our valve options, visit www.vikinggroupinc.com or contact your local Viking SupplyNet distribution center.

■ Asurio, Inc. Announces Fast-Track Capability to Transition MobileEyes System Inspector Software Users to BirdDog Inspection Software

Asurio, Inc. announced it has developed a fast-track process to help users of MobileEyes System Inspector software quickly & easily transition to BirdDog Life Safety Inspection & Data Collection Software. Asurio has developed this offering in response to the announcement that MobileEyes Corp. is discontinuing its MobileEyes System Inspector software as of June 2022. This fast-track software migration capability makes the BirdDog Life Safety Inspection Software the best MobileEyes System Inspector alternative.

The BirdDog Inspection System is powerful, configurable, life safety inspection software that's designed for industries & organizations that need to conduct inspections for fire life safety, government requirements & more. Configurable for national, regional & local fire safety inspection standards, the BirdDog Inspection System automates & streamlines the facility inspection process, and also manages, shares & reports on inspection data & inspection results.

Given that MobileEyes System Inspector software is being discontinued as of June 1, 2022, fire life safety contractors using MobileEyes System Inspector will need to transition to new software prior to June 1, 2022. To facilitate this, Asurio, Inc. has developed a fast-track process for life safety contractors to migrate from MobileEyes System Inspector to BirdDog Inspection Software.

For life safety contractors looking for the best MobileEyes System

continued from page 64

Inspector alternative, Asurio is offering the following migration support:

- 1) **Fast-tracked Inspection Data Migration:** The Asurio team has developed a process for quickly and efficiently migrating a fire contractor's specific inspection data from MobileEyes System Inspector to the BirdDog Inspection System.
- 2) **Multiple Training Options:** New users can get up to speed on using the BirdDog Inspection System in 3 ways: 1) In-person or virtual training with a BirdDog trainer; 2) Helpful "how-to" videos; and 3) Asurio's tech support department.
- 3) **Support from Asurio's In-house Forms Team:** Asurio is unique in that it has a dedicated inspection forms team to provide BirdDog users with the inspection forms they need;
- 4) **Asurio Customer Success Program:** Asurio offers an innovative Customer Success Program that involves Asurio representatives reaching out to customers to help them maximize their use of the BirdDog Inspection System, not just at the beginning, but over time...and more.

Asurio, Inc. can be reached at: www.asurio.com, or 877.444.1488.

■ SFPE Foundation Awards Research Grant to Study Environmental and Health Impacts of Fire and Fire-Suppression Activities During Large-Scale Fire Events

The SFPE Foundation announces the funding of a research award to study the environmental and health impacts of fire and fire-suppression activities during large-scale fire events. The research will be led by Principal Investigator Jamie L. McAllister, Ph.D., P.E., and Co-Investigator Brendan McCarrick, P.E., both with FireTox, LLC.

The primary objective of the research is to characterize the environmental and health impacts following large-scale wildland and structural fire events. The primary research will include a literature review, identification of current systems for monitoring large-scale fire incidents, identification of current tools and resources used to quantify the impact of large-scale fire events, and a gap analysis to inform future research. Findings of the study are expected to be published and presented at the SFPE Annual Conference and Expo in Detroit, MI, USA, October 12-14, 2022.

Financing for SFPE Foundation-funded research is provided through the generous support of donors, including SFPE, SFPE chapters, SFPE members, governmental agencies, leading companies and organizations, and others. Demand for SFPE Foundation research funding support far exceeds available funds. The SFPE Foundation periodically invites research proposals through both open calls and specific requests for proposals.

Additional information about the SFPE Foundation, its programs, and this research project is available at sfpe.org/foundation.

■ Industry-First UL Certified Tyco® LFII Lead-Free Sprinkler Uses Unique Polymeric Material for Residential Fire Protection

Johnson Controls launches the Tyco Series LFII Residential 4.9 K-factor Lead-Free for 13D Sprinkler. The concealed pendent sprinkler is manufactured with a polymeric material that carries anti-heat and anti-corrosion properties, making it ideal for long-lasting dependable fire protection in residential occupancies. It is the first fire sprinkler to be certified to ANSI/UL 199, the Standard for Automatic Sprinklers for Fire-Protection Service, specific to the use of polymer-based materials, by UL.



The **Tyco LFII 4.9K Lead-Free for 13D Sprinkler** is intended for use in wet pipe residential sprinkler systems for one- and two-family dwellings and manufactured homes per NFPA 13D. It is also certified to NSF 372 and NSF 61 to ensure compatibility with safe drinking water and lead-free plumbing requirements.

The **Tyco Series LFII 4.9K Lead-Free for 13D Concealed Pendent Sprinkler** is available in both ordinary 155°F (68°C) and intermediate 200°F (93°C) temperature configurations. The sprinkler and cover plate assembly allows for adjustment up to 3/4-inch, which provides additional flexibility with residential installations.

The **Tyco Series LFII 4.9K Lead-Free for 13D Concealed Pendent Sprinkler** complements a full line of Johnson Controls fire suppression products. Together, they help serve the company's mission of reimagining building performance to support healthy people, healthy places and a healthy planet.

Visit www.tyco-fire.com to learn more.

■ Xaap Compliance Reporting Platform Surpasses Milestone of One Million Building Inspections Performed



Simply smarter compliance

Johnson Controls celebrates a milestone as the Xaap Compliance Reporting Platform surpasses one million building inspections. Since 2018, facility managers and their teams have used the Xaap compliance reporting software to test nearly 55 million individual building devices, including fire alarms, extinguishers, security

continued on page 66

continued from page 65

devices, sprinklers, and other systems across North America. Xaap has helped these customers identify more than 500,000 deficiencies within their building systems, uncovering many opportunities to improve building safety and compliance.

Xaap is a mobile- and web-based building inspection reporting application that provides a single, centralized platform for tracking, maintaining and reporting building system compliance. The mobile app allows inspectors to capture inspection data and generate reports directly from their mobile devices. Xaap is designed to help make the lives of inspectors, technicians, service managers, back-office teams, facility managers and building owners easier. By streamlining the inspection process through a variety of smart application features, Xaap helps deliver accurate and efficient inspection reporting.

Key features include ready-to-use and customizable report templates, digital signature capture, barcoding, inventory management, a historical report repository, a deficiency dashboard and an analytics dashboard. With a shared source of data, building teams can collaborate seamlessly, stay better coordinated and operate in sync.

In addition to providing more accurate and efficient inspection reporting, Xaap also empowers building and facility managers, inspectors and technicians with powerful control and insights. This includes digital access to inspection reports and other facility documents 24/7, a centralized view of systems and compliance data, the ability to establish permissions and the data that can be leveraged to increase efficiency, lower costs and improve safety and security.

Xaap plans to further evolve the platform offerings for the future, including features that allow users to schedule, dispatch and track inspections and repairs to help ensure inspections aren't overlooked and deficiencies are addressed promptly. As more data is gathered through the Xaap platform, insights from the dashboard will continue to improve and more accurately pinpoint emerging trends and KPIs.

Xaap is available on the App Store and Google Play. To learn more about Xaap, visit <https://www.xaapbuildings.com/>.

■ Reliable Automatic Sprinkler Co., Inc. Announces Expanded Approvals on its Line Of Model FX Differential Dry Pipe Valves.

The Model FX Dry Pipe Valve is a differential type, externally resettable valve used to control water flow to a sprinkler system subject to temperatures below 40°F (4°C). The valve clapper is held in the set position by pneumatic pressure, which acts on a larger surface area than that of the incoming water pressure. For the valve to open, pneumatic pressure from the system must be released. In addition to existing Listings and Approvals, the Model FX recently received FM Approval for the 6" size.

The model FX valve is fully assembled and rigorously tested at Reliable's Liberty, South Carolina manufacturing facility. It is available pretrimmed, including optional butterfly control valve and/or accelerator. Alarm and high/low air pressure switches are



Dry Sprinklers with Standard Escutcheons

included with pretrimmed FX valves. The single FX valve assembly makes it easy to specify, order and install, which saves valuable time for designers, purchasing managers, and fitters. The Model FX is available in 2" through 6" sizes, with Groove/Groove, Flange/Groove, and Flange/Flange end connections.



Model FX Dry Pipe Valve

For comprehensive product options, approvals and specifications, refer to bulletin 360 or visit reliablesprinkler.com/fx.

■ Reliable Automatic Sprinkler Co., Inc. introduces Model MV Spray Nozzles

Reliable Automatic Sprinkler Co., Inc. announced the introduction of Model MV Medium Velocity Directional Spray Nozzles.

Reliable® Model MV Spray Nozzles are open directional spray nozzles designed for use in water spray fixed systems for fire protection applications. Model MV Nozzles are available in 8 deflector angles and 7 orifice sizes, providing a comprehensive range of options to protect exposed vertical, horizontal, curved,

continued from page 66



Flowing Model Medium Velocity MV Nozzle



MV Nozzles come in 8 deflector angles and 7 orifice sizes

and irregularly shaped surfaces.

Model MV Nozzles are supported by a library of 3D CAD blocks. Each of the 72 discharge patterns have been accurately measured and modeled in Reliable's Liberty, South Carolina flow lab. "The CAD resources give designers the ability to lay out a variety of protection schemes quickly and accurately," noted Director of Technical Services Cary Webber. "Between the extensive product offering and accurate CAD models, designers can create the optimum protection scheme without the guesswork."

Model MV Nozzles are used primarily in accordance with NFPA 15 and provide protection of irregularly shaped surfaces to help prevent structural damage and protect against exposure fires. The small droplet size cools and absorbs heat from an external fire.

cULus Listed, Model MV nozzles are available in either unfinished brass or brass with Electroless Nickel PTFE (ENT) plating. K-Factors range from 1.2 (17 metric) to 7.2 (104 metric), and deflector angles are available from 65° to 180°. Optional blow-off caps include an identification mark to indicate K-Factor.

For more information on the Model MV Medium Velocity Directional Spray Nozzles refer to Bulletin 106 or visit www.reliablesprinkler.com/mvnozzles.

Reliable Automatic Sprinkler Co., Inc. Introduces Printed Cover Plates for Flat Plate Concealed Sprinklers



Woodgrain and custom printed cover plates

Reliable Automatic Sprinkler Co., Inc. announced the introduction of standard and custom printed cover plates for use with flat plate residential, commercial, and special concealed sprinklers. Reliable® now offers 12 standard wood grain and custom printed finishes for its G5, G6, and RFS flat cover plates.

"This offering applies to our most popular flat plate concealed sprinklers," noted Reliable Vice President of Sales Kevin T. Fee, Jr. "this includes pendent and sidewall versions of many residential, extended coverage, dry, and special flat plate concealed sprinklers."

This addition to Reliable's standard, special application, and custom paint matched finishes makes Reliable flat plate concealed sprinklers the ideal choice for custom homes and architecturally sensitive commercial spaces.

Using an ultraviolet cured ink application, the final finish is durable and stable under all lighting situations. Custom printed covers are created by sampling a 4" x 4" (100 mm x 100 mm) piece of the material to be matched. Reliable® respects the rights of intellectual property owners and will not print cover plates with images protected by trademark or copyright.

Visit reliablesprinkler.com/covers for more information or refer to Bulletin 203 for technical information on Reliable's complete cover plate offering. Refer to each product's technical bulletin for specific Listings and Approvals. •



Advertising Members:

Our 2022 Media Kit is available online at <https://bit.ly/22MediaKit>.

Get all the info you need to hit your target market all year round!

We hope you'll choose to support our Advocates' Coalition as we work to create Fire Safe Homes

Working together, we can create resources to educate those who make the decisions regarding community fire protection.

Our goal is to be a go-to resource for community leaders who need a first-person account of the devastating impact fire can have on a community and a family. We can prevent future tragedies, and we believe that our stories help everyone understand in a way that makes a difference. Visit our website for additional resources and information. Order our Media Kit for a complete package of PSAs, media information, talking points, statistics and actual examples of resources used in communities. Your support is greatly appreciated, and as a non-profit 501(c)3 we are now ready to grow our mission and expand our efforts. We hope you'll support our team as an Advocate, Supporter or Corporate member (details on reverse side, along with form).



Did you see us on Fox & Friends and Good Morning America?



FOX & friends

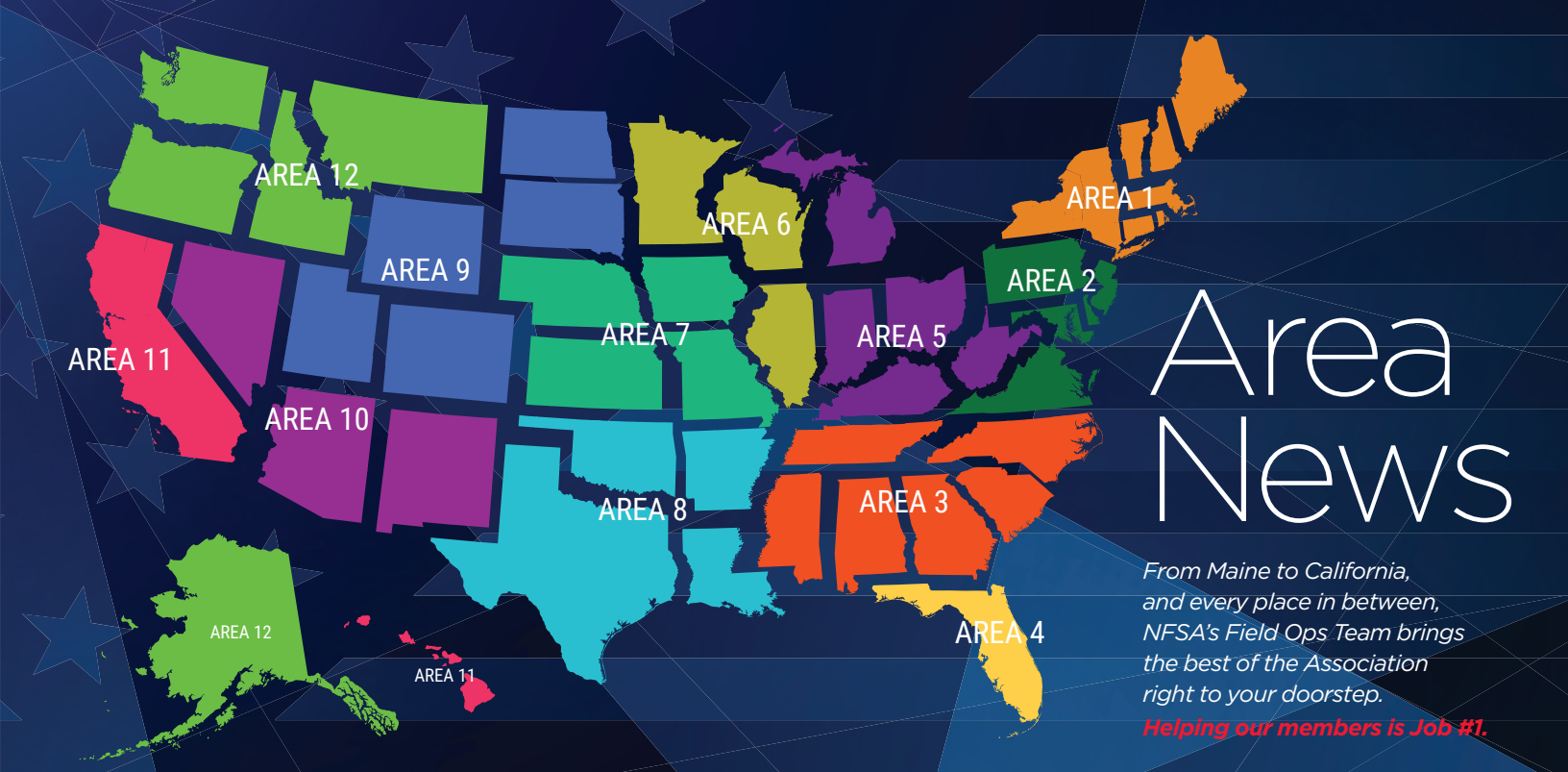
GOOD MORNING AMERICA



 CommonVoices1

 CommonVoices1

fireadvocates.org
Fire Sprinklers Save Lives



Area News

From Maine to California, and every place in between, NFSA's Field Ops Team brings the best of the Association right to your doorstep. *Helping our members is Job #1.*

AREA 1:

CONNECTICUT, MASSACHUSETTS, MAINE, NEW HAMPSHIRE, NEW YORK, RHODE ISLAND, VERMONT



Fire Chiefs Association Conference

NFSA had a booth at the 2022 Fire Chiefs Association of Massachusetts Professional Development Conference and Trade Show held at the DCU Center in Worcester, Massachusetts. All vendor spaces were sold out and over 400 attendees were back after a two-year hiatus due to COVID-19.

The keynote speaker for the conference was General Stanley McCrystal. Everyone was thrilled to be back. For many, this was the first event of its kind they had been to since the last one held the end of February 2019.

Side-by-Side Burn Demos at Big E

NFSA participated in the first meeting to propose multiple side-by-side burn demonstrations at the Eastern States Exposition Center in September. All positive responses so far. This event sees well over a million people through their gates during the multi-day event.

AREA 2:

DELAWARE, MARYLAND, NEW JERSEY, PENNSYLVANIA, VIRGINIA, DISTRICT OF COLUMBIA

Milton, Delaware Adopts Sprinkler Requirement

Thanks to the Delaware Fire Sprinkler Coalition's Paul Eichler for bringing this to our attention.

One of the fastest-growing communities in Delaware will now require residential fire sprinkler systems in one- and two-family detached housing and townhouses starting April 1, 2022. Following on the heels of the City of Lewes and their sprinkler ordinance, the Town of Milton has taken the huge step forward to protect their citizens and first responders. Many thanks to the leadership of Milton for recognizing the importance of residential.

2022 Burn Demos

The **NFSA Mid-Atlantic Team** has gotten off to a fast start in preparing for the 2022 burn season. At the time of this report, the team has scheduled burn trailers for 51 burn demonstration

continued on page 70

continued from page 69

events in both New Jersey and Pennsylvania. Of those 51 events, 27 are commitments to the Fire Departments of NJ and PA for NFPA 13E training (*Recommended Practice for Fire Department Operations in Properties Protected by Fire Sprinkler and Standpipe Systems*). Between the classroom presentations, the firefighters are invited to meet outside at the fire sprinkler demonstration trailer to witness a live fire sprinkler demonstration. The training has been very well received by participating departments and has been a great way to introduce the NFSA to the AHJs, highlighting the resources that NFSA has to offer. The team has also committed to six side-by-side trailer events that will take place across New Jersey and the Philadelphia area. The scheduled burn trailer events will start in mid-April and continue through the month of November.

On Saturday, April 30th the Mid-Atlantic team will be traveled to Rutgers University in New Brunswick, New Jersey for the University's big annual event, *Rutgers Day*. Rutgers Day is a free event and open to the public with free performances, exhibits, hands-on activities, and demonstrations. Rutgers Day engaged attendees about the valuable contributions the University makes to the people of New Jersey and beyond.

The NFSA Mid Atlantic Team had both the burn trailer and side-by-side burn trailer at the event with the mission of bringing awareness to fire prevention and educating the public on the fire sprinkler concept.

In addition to Rutgers Day, the burn trailers will be attending events in the tri-state area such as block parties, country fairs, touch-a-truck events, and youth fire and police academies. This burn season will be a busy and exciting one. Based on last year's numbers, the expectation is to book another 20-30 burn trailer events as we move through the burn season and draw closer to Fire Prevention Month in October.

Big Win for Retrofitting in Maryland

A big win for retrofitting in Maryland. NFSA has worked on this project for about five years and help to establish cost reductions for water main tap fees, low interest loans, tax incentives, time frames for installations, and overall advocacy for automatic fire sprinkler retrofit.

The City of Annapolis passed groundbreaking legislation requiring automatic fire sprinklers to be retrofitted in historic buildings in the capital of Maryland. The National Fire Sprinkler Association has worked with the City of Annapolis County Council, businesses and the City of Annapolis Fire Department after several tragic historic properties were lost due to fires.

We would like to commend the actions of Mayor Buckley, the Council members, and fire department, for their tireless efforts to protect the historic district with loan interest loans and tax incentive, all aimed at retrofitting building with automatic fire sprinkler systems. A special gratitude for Alderwomen Eleanor "Elly" Tierney for her undaunted efforts championing this legislation that will protect all those that live and visit Maryland's capital city of Annapolis for years to come. We must remember that our historic buildings are not preserved until they are protected with automatic fire sprinkler systems.

AREA 3:

ALABAMA, GEORGIA, MISSISSIPPI, NORTH CAROLINA, SOUTH CAROLINA, TENNESSEE



Before Fire, Fertilizer Plant Was Storing More Than 4.5 Million Pounds Of Chemicals Onsite

Before a massive blaze erupted at the Weaver Fertilizer plant in Winston-Salem, NC in late January, it was storing more than 2,000 tons — roughly 4.5 million pounds — of chemicals every day at its facility, according to the company's most recent chemical inventory filed with state emergency management officials.

The fire burned for four days. The risk of explosion was so great that Winston-Salem officials asked people to evacuate within a mile radius, temporarily displacing 6,000 residents.

While ammonium nitrate isn't inherently explosive, it is classified as an oxidizer. It can catch fire, smolder or explode under certain circumstances, such as if it is stored in a confined space or comes into contact with hot materials. Federal regulations for ammonium nitrate are lax.

Weaver stored on average 138 tons per day of urea, with a daily maximum of nearly 250 tons. When urea catches fire it melts and decomposes, according to the National Library of Medicine, a federal database. Burning urea generates ammonia, a toxic gas.

Weaver Fertilizer was legally allowed to store the material in wooden buildings without sprinkler systems because the structures met code requirements at the time they were constructed, as early as 1939.

AREA 4:

FLORIDA, PUERTO RICO

Florida

NFSA at Daytona 500

Check out the #20 DeWalt car driven by Christopher Bell at the Daytona 500. DeWalt, caring about life safety, added the NFSA logo as a featured logo on their car.

What a great opportunity for NFSA to be represented in such a cool way. NFSA Board



Tripp Long with Dewalt and Zarko Ognjenovic

continued on page 71

continued from page 70



NFSA Board Members Zarko Ognjenovic and Robert Cariveau

Members, Zarko Ognjenovic, MJ Wood and Robert Cariveau, Wiginton Fire Systems, were invited to join DeWalt at the races. Thank you DeWalt for recognizing us in such a great way!

AREA 5:

INDIANA, KENTUCKY, MICHIGAN, OHIO, WEST VIRGINIA



NFSA President Shane Ray Tours New Indiana Fire and Public Safety Training Facility

Indiana Executive Director of Homeland Security Stephen Cox and Indiana State Fire Marshal Joel Thacker invited NFSA President Shane Ray and NFSA Director of Field Operations and Government Relations Gary West to tour the Indiana Fire and Public Safety Academy located in Plainfield, Indiana.

NFSA's partnership with Director Cox and Marshal Thacker was forged ever stronger when President Ray committed to gift Indiana with a fire sprinkler side-by-side burn demonstration training trailer to be presented in early spring. Before leaving, President Ray addressed approximately 50 Indiana Fire Chiefs who were

attending training classes and thank them for their support in promoting the widespread acceptance of fire sprinklers.

AREA 6:

ILLINOIS, MINNESOTA, WISCONSIN

Illinois

Banquet Hall's Fire Safety Improvements Recognized by Lemont Fire Protection District

The Lemont Fire Protection District has recognized Jerry Kulhanek, owner of The Bridge Lemont, for retrofitting his banquet hall with fire sprinklers. The fire district presented a plaque to Kulhanek during the district's fire safety open house.

The Bridge Lemont is a rustic-industrial style wedding venue located in the historic district. The original 7,000 square foot building was constructed before fire sprinklers were required by code. Kulhanek decided to voluntarily move forward with the retrofit project after a presentation by Lemont Fire Protection District Fire Marshal Mark Blackaller, who provided him with information about a potential federal tax incentive to offset the retrofit cost.

Blackaller said he is relieved this large venue is now protected with fire sprinklers, especially because it is located in the historic district. "By putting a sprinkler system in, his customers and employees will be protected. It is benefitting the community and his business," he said. "After the inspections, Jerry came to us and said he was very pleased that he had made the decision to go ahead and sprinkler the building." Installed fire sprinklers improve public safety in the historic area, Blackaller notes. "So many of the buildings are old and close together. Fire can spread quickly and possibly spread to other buildings. Buildings protected with fire sprinklers are a benefit to Lemont because the technology prevents loss of life and property, protects our firefighters."

AREA 7:

IOWA, KANSAS, MISSOURI

Great Bend Economic Development Awards First Loft Grant

Plans to update an iconic downtown structure took another step forward as Great Bend, Kansas Economic Development Inc. presented B&H Development with a ceremonial check for more than \$85,000.

The check for \$85,250 to aid with renovations on the old Masonic Lodge Building in the 2000 block of Lakin Avenue represents the first downtown loft grant awarded by the GBED with funds made available through the city of Great Bend.

The funds are the first of what will be up to \$1 million in American Rescue Plan Act funds set aside by the City for GBED last July for a downtown rehabilitation project to assist in fire sprinkler system installation and other improvements to downtown lofts.

continued on page 72

continued from page 71

AREA 8:

ARKANSAS, LOUISIANA, OKLAHOMA, TEXAS

NFSA Makes Tracks In The South Central State-2022!

NFSA Staff Members hit the road running from January – June 2022. Together we visited and provided national and regional fire sprinkler training and updates in the following South-Central locations:

- Houston, TX – Membership Department
- San Antonio, TX – National Fallen Firefighters Foundation
- Pharr, TX – 3 Days of Training
- Dallas, TX – Winsupply Meeting and Membership Department
- Lubbock, TX – 3 Days of Training
- Waco, TX – Texas Fire Chiefs Conference
- Arkansas, TX – Arkansas Fire Marshals Association
- Oklahoma, TX – Oklahoma Fire Sprinkler Association
- Houston, TX – Fire Sprinkler Contractors Association of Texas

City of Houston Permitting Center

Name Change Fee to Include Permit Applications

Effective April 1, 2022, in accordance with Section [A]105.4 of the recently adopted 2015 IBC, fees will be charged for changing a name or other information on a permit application, existing permit or certificate.

Single-Reviewer Assignments Coming Soon

Starting February 7, 2022, resubmitted plans will be assigned to the plan reviewer or engineer that completed the first review. This change will provide continuity in service that will reduce the number of review cycles to receive plan approval. Single-reviewer assignment applies to all departments that participate in the plan review process for private and public construction.

Customers will receive a notification when their assigned reviewer or engineer has scheduled extended time-off. Customers may choose to wait until the reviewer returns or allow another reviewer or supervisor to review their plan.

Revisions to the Residential Prerequisite Checklist (CE-1301)

Changes have been made to the Stormwater Information Form exemption requirements. To view these changes, download the most recent copy.

Oklahoma Uniform Building Code Commission - OUBCC Emergency Rules Adoption

The OUBCC approved emergency rules on February 7, 2022, a special commission meeting, related to storm shelter requirements for critical emergency operations and Group E occupancies. The emergency rules moved these requirements into OUBCC created appendices in the adoptions of the 2018 International Building Code and International Existing Building Code. These requirements are no longer mandatory at the state level, but may be

mandatory in each local jurisdiction, if included in their adoption ordinances or orders.

The Governor approved the emergency rules on Friday, February 18, 2022. The rules went into effect immediately upon the Governor's approval.

NFSA South Central 2022 Legislative Work

NFSA South Central has been monitoring state legislative bills in Arkansas and Oklahoma. 365 Days a Year; our NFSA Legislative Team made up of National and Local staff continue to track all proposals related to fire sprinklers, contractors, and codes, as well as other industry topics. The following are legislative session dates for Area 8.

Arkansas – February 14, 2022, to March 2022

Louisiana – March 14, 2022, to June 2022

Oklahoma – February 7, 2022, to May 2022

Texas – January 10, 2023 to May 29, 2023

NFSA South Central Proposed Laws & Rules

Arkansas Department of Health Rules Pertaining to Retail Food Establishments – Retail food establishments may not store food under certain conditions, one of those is under leaking water lines, including leaking automatic fire sprinkler heads, or store under water lines on which water has condensed.

OKLAHOMA

OK SB 380- Independent contractor classification; creating the Uniform Worker Classification Act. Creates Independent Contractor law. Clarity needed in the bill - not certain if an out-of-work fitter can become an independent contractor. The apparent attempt of the bill is to relieve the owner from workers' comp, employee wages, and other business issues leaving it on the shoulder of the independent contractor, the language in the bill has language that could be interpreted to mean "notwithstanding" other laws.

OK SB 1296 - Vaccinations and immunizations; providing exemption form for use by employees to refuse to disclose vaccination status to employers. Relating to vaccinations and immunizations; discrimination in employment; modifying language to include disclosure of vaccination and immunity status; discriminatory practices; requires certification of disclosure exemption be provided; providing for submittal time frame; requiring certain acceptance.

OK SB 1720 - Occupation certification; allowing for private certification of professionals. An Act relating to occupation certification; providing definitions; allowing for the private certification of professionals; requiring private certifying organizations to register with the Secretary of State

OK HB 2864 - Professions and occupations; Electrical License Act; modifying exemption for certain electrical wiring systems.

continued on page 73

continued from page 72

OK HB 2968 - Data privacy; Oklahoma Computer Data Privacy Act of 2022; consumer protection; severability. Privacy of computer data that could be related to ITM with Fire Sprinklers. Also providing consumers the right to opt-out of data collection. A business covered by this act shall only collect and/or share information with third parties that is reasonably necessary to provide a good or service to a consumer who has requested the same or is necessary for security purposes or fraud detection.

OK HB 3055 - Professions and occupations; creating the Occupational Licensing Act of 2022. An Act relating to professions and occupations; creating the Occupational Licensing Act of 2022; providing for no codification; and providing an effective date.

AREA 9:

COLORADO, NEBRASKA, NORTH DAKOTA,
SOUTH DAKOTA, UTAH, WYOMING

Glenwood Springs, CO Updates Building Codes to Include Fire Sprinklers

On March 3rd, a requirement for fire sprinkler systems in new residential developments was approved by the Glenwood Springs, CO City Council.

Residential sprinkler system requirements have been on the books for years in Glenwood Springs, but the city exempted small-scale new construction, such as one- and two-family units, city documents state. Sprinklers will be required in new homes and new additional dwelling units built separate from existing structures.

The new requirement is part of a series of building code updates, aligning the city's codes with state and national standards.

"There is a cost to having sprinkler systems, but what is the cost of a life," stated Assistant City Manager Jen Ooton. "We really think it is important to do this."

The change was approved unanimously.

AREA 10:

ARIZONA, NEVADA, NEW MEXICO

Las Vegas' Deadliest Residential Fire Brings Steady Progress on Safety Inspections

According to a city official, the city of Las Vegas is making progress toward its goal of inspecting 36 residential properties in response to an unprecedented deadly apartment fire more than two years ago.

As of March 10, Las Vegas had checked on 636 units across 13 properties that were included in the city's residential inspection program that was launched nearly a year ago.

In April, the City Council approved annual checkups at 36 residential motel and hotel residences, located primarily downtown. The program targeted properties with similar characteristics to the Alpine Motel Apartments where the fatal fire occurred, particularly in age and in housing style.

The Alpine Motel was the site of a fire that killed six people in December 2019, the deadliest residential fire in city history. Serious code issues were brought to light in the aftermath.

The city is currently surveying about one property a week and expects to complete initial inspections at all 36 sites by August.

AREA 11:

CALIFORNIA, HAWAII

Legislation

CALIFORNIA

Accessory Dwelling & Residential Fire Sprinklers

AB 1068: Affordable housing: alternative forms of development.

Residential Fire Sprinklers

AB 460: Fire protection: residential fire sprinklers: fees.

AB 916: Zoning: accessory dwelling units: bedroom addition.

Prohibit Fire Sprinklers

SB 897: Accessory dwelling units: junior accessory dwelling units.

HAWAII

Residential Fire Sprinklers

HB 207: Relating to Public Safety.

HB 212: Relating to Fire Protection.

HB 1476: Relating to Fire Protection.

HB 1477: Relating to Fire Protection.

HB 1482: Relating to Public Safety.

SB 448: Relating to Public Safety.

SB 453: Relating to Fire Protection.

SB 2009: Relating to Fire Protection.

SB 2010: Relating to Fire Protection.

SB 2015: Relating to Public Safety.

Tax Credit for Sprinklers

HB 206: Relating to Fire Protection.

SB 447: Relating to Fire Protection.

Funding Appropriations for Sprinklers

HB 1147: Relating to The State Budget.

SB 1256: Relating to The State Budget.

Contractor Licensing

SB 2709: Relating to Contractors.

Code Adoption

HB 1726: Relating to Agricultural Buildings.

HB 1747: Relating to The State Building Code Council.

SB 2148: Relating to The State Building Code Council.

SB 3196: Relating to Agricultural Buildings.

continued on page 47

continued from page 73

AREA 12:

ALASKA, IDAHO, MONTANA, OREGON, WASHINGTON

Northwest Update

As the Northwest shakes off its COVID restrictions, it's time to get chapter meetings and in-person fire sprinkler trainings on the calendar. Check out the Puget Sound and Columbia-Willamette chapter sites on the newly updated NFSA Communities webpage for the latest schedule.

Log on to the NFSA Learning website to register for the Estimating and Proposals for Installation of Water-Based Fire Protection Systems scheduled for the Seattle and Portland areas the last week in June. This new NFSA offering will use an interactive format and promises to provide you with innovative resources. If you and your team have training needs, be sure to contact Northwest Regional Manager Suzanne Mayr. NFSA is willing and able to bring training throughout the Northwest!

The Washington Residential Fire Sprinkler Coalition continues its quarterly "Best Practice" forums, with virtual events set for

June 9, Sept. 8 and Dec. 8. The forums provide open discussion on topics that contractors, AHJs and home builders experience in the field and in the planning process. Technical aspects of home fire sprinklers are also discussed.

As part of a Home Fire Sprinkler Coalition grant, the Northwest Region had received one of the "virtual reality" kits to bring a side-by-side burn to audiences where a live side-by-side burn is not feasible. (See the article in this issue for more information.) This kit will be particularly useful for city council and other policymaker meetings in which fire sprinkler ordinances are on the table. If you have ideas on venues for the virtual side-by-side kit, please contact Regional Manager Suzanne Mayr.

The 2022 Sprinklerman Shootout, co-sponsored by Sprinklerfitters Local 299 and the Fire Sprinkler Advisory Board of Puget Sound, will have a brand-new look with a move to the Auburn Golf Course. The has some schedule changes, with both the date (July 16) and the shotgun start time (7:30 a.m.) set for earlier than in previous years. However, the excellent comradery and competition will remain the same!•



NFSA is excited to announce that we will be hosting our **2022 Annual Seminar and Business & Leadership Conference Sept 28-30, 2022**, at *Sheraton Sand Key in beautiful Clearwater Beach, FL.*



You won't want to miss this event! The Sheraton Sand Key boasts 13 acres of private white sand beach and warm gulf waters!

Stayed tuned for more details and mark you calendars!





National Fire Sprinkler Magazine

The Flagship Publication of The National Fire Sprinkler Association

NFSM Article Submission Guidelines

National Fire Sprinkler Magazine (*NFSM*), a members-only publication of the National Fire Sprinkler Association, is published six times a year. It offers Fire Sprinkler Industry news and articles of interest to Association members.

Query

Send an e-mail or letter briefly describing your article proposal, why the topic is important, and how it is relevant to our audience. Say something about the sources of your information (*personal involvement? interviews?*) and about your present position and background. Tell us what types of photographs and graphics are available to illustrate your story. Be sure to include an email address and a daytime phone number.

NFSM runs full-length feature articles of approximately 800-1200 words.

Feature Articles

Articles for *NFSM* should be on a topic of significant interest to the industry. Articles promoting a specific product or service will not be published. We have advertising opportunities available to boost your sales.

Writing Guidelines

NFSM tries to maintain a straightforward style. Accuracy is vital. All facts should be double-checked before a manuscript is submitted. All manuscripts must be submitted as Word docs, single-spacing between sentences. Images must be submitted as separate hi-rez jpegs. Charts and tables must be submitted as separate pdfs.

Each manuscript should be accompanied by a list of resources on the topic at hand: relevant books and reports, conferences, and/or contact people and their phone numbers. To settle points of style, use *The Chicago Manual of Style* (University of Chicago Press).

Illustrations

NFSM uses a variety of photographs, line art, charts, and maps.

We prefer to receive artwork electronically, and all illustrations should include credit and caption information.

Copyrights

Articles must be exclusive to *NFSM* magazine and not submitted to any other industry publication, unless prior agreement has been reached. Author is responsible for the accuracy of article and that it does not infringe on any other copyright. All published submissions become the property of NFSA.

Payment

NFSM does not pay for articles; we do recognize an author with a byline and credit. NFSA reserves the right to reject any submission at its own discretion.

NFSM EDITOR:

Joanne Genadio

genadio@nfsa.org

443.863.4399



GARY L. WEST
Director of Field Operations/Kansas
 HAWAII, ARIZONA, CALIFORNIA, NEW MEXICO, NEW YORK
 EMAIL: WEST@NFSA.ORG
 MOBILE: 443.202.3621



PAUL RICHARD
St. Louis Local Coordinator
 MISSOURI
 EMAIL: RICHARD@NFSA.ORG
 PHONE: 443.312.2207



DAVE KURASZ
Executive Director, NJFSAB
 PENNSYLVANIA, NEW JERSEY, DELAWARE
 EMAIL: KURASZ@NFSA.ORG
 MOBILE: 732.492.0707



TIM BUTLER
North Central Regional Manager
 IOWA, MINNESOTA & WISCONSIN
 EMAIL: BUTLER@NFSA.ORG
 OFFICE: 443.844.3674
 MOBILE: 507.403.2264



TERIN HOPKINS
Field Service Coordinator/Capital Region
 CAPITAL REGION/MARYLAND
 EMAIL: THOPKINS@NFSA.ORG
 MOBILE: 443.745.4142
 OFFICE: 443.743.3858



MARTY KING
Wisconsin State Coordinator
 EMAIL: KING@NFSA.ORG
 PHONE: 414.531.9542



BRIAN BIGGS
Southeast Regional Manager
 ALABAMA, GEORGIA, MISSISSIPPI,
 NORTH CAROLINA, SOUTH CAROLINA, TENNESSEE
 EMAIL: BIGGS@NFSA.ORG
 PHONE: 615.642.9717



TOM BRACE
Minnesota State Coordinator
 EMAIL: BRACE@NFSA.ORG
 PHONE: 651.644.7800



LORRELL BUSH
Florida & Puerto Rico Regional Manager
 FLORIDA, PUERTO RICO
 EMAIL: BUSH@NFSA.ORG
 PHONE: 352.589.8402
 MOBILE: 954.275.8487



CYNTHIA GIEDRAITIS
South Central Regional Manager
 ARKANSAS, LOUISIANA, OKLAHOMA, TEXAS
 EMAIL: CINDYG@NFSA.ORG
 PHONE: 979.324.89341



RON RITCHEY
Great Lakes Regional Manager
 INDIANA, MICHIGAN, OHIO, WEST VIRGINIA, KENTUCKY
 EMAIL: RITCHEY@NFSA.ORG
 PHONE: 765.412.6707



ROBERT GEISLINGER
Field Service Coordinator/Great Plains
 COLORADO, NEBRASKA, NORTH DAKOTA,
 SOUTH DAKOTA, UTAH, WYOMING
 EMAIL: GEISLINGER@NFSA.ORG
 DIRECT: 443.312.2206
 MOBILE: 720.457.9292



ERIK HOFFER
Executive Director NIFSAB
 ILLINOIS
 EMAIL: HOFFER@NFSA.ORG
 PHONE: 708.749.5460



SUZANNE MAYR
Northwest Regional Manager
 ALASKA, IDAHO, MONTANA, OREGON, WASHINGTON
 EMAIL: MAYR@NFSA.ORG
 PHONE: 253.208.8467



GAST[®]



RISE ABOVE THE REST



DEPENDABLE DELIVERY

You've got a deadline to meet, and we're not in the business of delaying your progress. When it comes to on-time delivery of jobsite material, you can count on the industry's top choice for fire protection products.

FERGUSON
FIRE & FABRICATION

VISIT US ONLINE AT
[FERGUSON.COM/FIRE](https://www.ferguson.com/fire)