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Let's Be Honest: The Economy Is NOT Doing Well

An April 10, 2024, article by Connor O'Keeffe on www.mises.org said the American economy is not all right. But to see why, you need to look beyond the dramatic numbers we keep seeing in the headlines and establishment talking points.

Take, for instance, the latest **jobs report**. For the third month in a row, the American economy added significantly more jobs than most economists had been expecting... But as Ryan McMaken laid out over the weekend, things don't look as strong when you dig into the data. For instance, virtually all the jobs added are part-time jobs. Full-time jobs have actually been disappearing since December of last year. In fact, as McMaken highlighted, "The year-over-year measure of full-time jobs has fallen into recession territory."

Also, most of these new part-time jobs are going to immigrants, many of whom are in the country illegally. There has been zero job creation for native-born Americans since mid-2018. While immi-

grants are not harming the economy by working, the scale of new foreign-born workers has papered over the employment struggles of the native-born population.

Further, government jobs accounted for almost a quarter of those added – way above the standard ten to twelve percent. Just like with government spending and economic growth, government hiring boosts the official jobs number while draining the actual, value-producing economy.

Some economists, like Daniel Lacalle, argue that the **US economy is already experiencing a private-sector recession** but that government spending and hiring are propping up the official data.

A recession is inevitable, thanks to the last decade of interest rate manipulation by the Federal Reserve – and especially to its dramatic actions during the pandemic. The recession-like conditions in full-time jobs is further evidence that Lacalle is right.

At the same time, prices are still high. And they continue to rise at a rate that frustrates even some of President Joe Biden's biggest economic cheerleaders. Our dollars are worth about 2% less than they were four years ago, with no pros-

pect of that trend reversing. That hurts.

But instead of addressing this economic pain, much less their role in creating it, members of the political class are still pretending everything is great. They're even gearing up to make things worse by, for example, sending even more of our money to Ukraine.

And at home, President Biden is scrambling to put the brakes on energy production and to transfer money from the working class to his base of college graduates, all before the election.

Predictably and appropriately, the establishment's head-in-the-sand economic strategy is coinciding with a notable decrease in support for the Democrats – the establishment's preferred party these days. President Biden is behind in the polls in six of the seven swing states and is losing support from working-class and nonwhite voters.

The political establishment and its preferred candidates deserve to lose support, not only for failing to acknowledge America's economic problems but for causing them in the first place.

This article was edited for space.

Note: The views expressed on Mises.org are not necessarily those of the Mises Institute.

*You will eat the fruit of
your labor; blessings and
prosperity will be yours.*

– Psalm 128:2 (NIV)

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Fire Sprinkler Saves

The following is a press release on one of two sprinkler saves in Delaware last night [4/8/24]. A sprinkler activation also made short work of a small fire at the Dover Hampton Inn.

All buildings should be built with fire sprinkler systems, especially residential structures, i.e. single-family homes and townhomes.

— Paul Eichler

Delaware Fire Sprinkler Coalition
ike653@hotmail.com

From the Office of Wilmington Fire Chief John Looney

On April 8, 2024, at 2126 hours, the Wilmington Fire Department responded to the 400 block of A Street for a fire alarm activation. Wilmington Fire Department units arriving on scene found nothing showing from the exterior of a five-story apartment building. Upon entering the structure, fire department personnel were advised that a fire had occurred in a 3RD floor apartment kitchen, **but was extinguished by the sprinkler system.**

After investigating the report, firefighters confirmed that the fire had been extinguished and secured the water to the **sprinkler system** in the affected area and ventilated the remaining smoke from the affected floor. After securing the **sprinkler system** and venting the smoke, the building was turned over to building management. **Due to the quick action of the sprinkler system,** a serious fire was prevented and a majority of the residents were able to return to their apartments immediately....



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Happy Memorial Day
May 27, 2024



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National

Construction Backlog Indicator

Associated Builders and Contractors (ABC) reported that its *Construction Backlog Indicator* declined to 8.1 months in February, according to an ABC member survey conducted February 20 to March 5. The reading is down 1.1 months from February 2023.

Backlog fell for every size of contractor except for those with under \$30 million in annual revenues in February. Over the past year, however, the largest contractors – those with greater than \$50 million in revenues – have experienced the greatest decline in backlog.

ABC's *Construction Confidence Index* readings for sales, profit margins, and staffing levels also decreased in February. However, all three readings remain above the threshold of 50, indi-

cating expectations for growth over the next six months.

"Backlog is declining and confidence began to fade modestly in February," said ABC Chief Economist Anirban Basu. **"While it is far too early to predict an industrywide downturn** given that confidence readings continue to signal growth along sales, employment, and profit margin dimensions, it appears that **a rising tide of project cancellations and postponements has begun to make its mark.**"

"With excess inflation remaining stubbornly durable, at least according to certain measures, interest rates are poised to remain higher for longer. That gives higher borrowing costs more time to upset the economic momentum that has so surprised economists over the past two years and has provided support for various nonresidential construction activities. With so much federal money still entering the economy [the primary cause

of inflation], there will continue to be support for growth in certain construction segments, including public works and manufacturing-related megaprojects, **but industry weakness is more apparent in segments that rely more purely on private financing."**

National

ABC: OSHA Worker Walkaround Rule

Associated Builders and Contractors (ABC) issued the following statement opposing the *Occupational Safety and Health Administration's Worker Walkaround Representative Designation Process* final rule, which allows employees to choose a third-party representative, such as an outside union representative or community organizer, to accompany an OSHA safety inspector into nonunion workplaces during site inspections.

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“Now, construction employees and employers could face serious safety concerns because the final rule has the potential to allow anyone on a jobsite,” said Greg Sizemore, ABC Vice Pres. of Health, Safety, Environment, and Workforce Development. “There simply is no business case for this final rule and no benefit during a compliance inspection.

“By allowing outside union agents access to nonunion employers’ private property, OSHA is injecting itself into labor-management disputes and casting doubt on its status as a neutral enforcer of the law.

“OSHA can have a bigger impact on jobsite safety by fostering positive part-

nerships with employers and promoting safety practices that produce results.”

National

ABC Lawsuit: Anti-Competitive Project Labor Agreement Rule

Associated Builders and Contractors (ABC) and its Florida First Coast Chapter filed suit (March 28) in federal court to stop the Biden administration’s unlawful scheme to mandate project labor agreements (PLA) on construction contracts procured by federal agencies. ABC’s complaint asserts that President Joe Biden lacks the legal and constitu-

tional authority to impose a new federal regulation injuring economy and efficiency in federal contracting and illegally steering construction contracts to certain unionized contractors, which employ roughly 10% of the U.S. construction workforce.

ABC estimates the Biden pro-PLA policy will affect at least 180 federal construction contracts valued at \$16 billion across America on an annual basis, including several federal construction contracts for projects in Jacksonville and dozens of projects in Florida and the Southeast.

“When mandated by government agencies, PLAs needlessly increase construction costs by 12% to 20%, reduce opportunities for qualified large and small contractors and their craft and noncraft employees, and exacerbate the construction industry’s worker shortage of more than half a million people by discriminating against the nearly 90% of the industry workforce that is not unionized,” said Ben Brubeck, ABC Vice President of Regulatory, Labor, and State Affairs. “PLAs discourage competition by forcing contractors to sign union collective bargaining agreements, which require them to follow inefficient and cumbersome union work rules, hire most or all workers from union halls and apprenticeship programs, accept compulsory union representation on behalf of any remaining members of its existing workforce, and expose them to union wage theft of up to 34% of their compensation unless they join a union and vest in union benefits plans.”

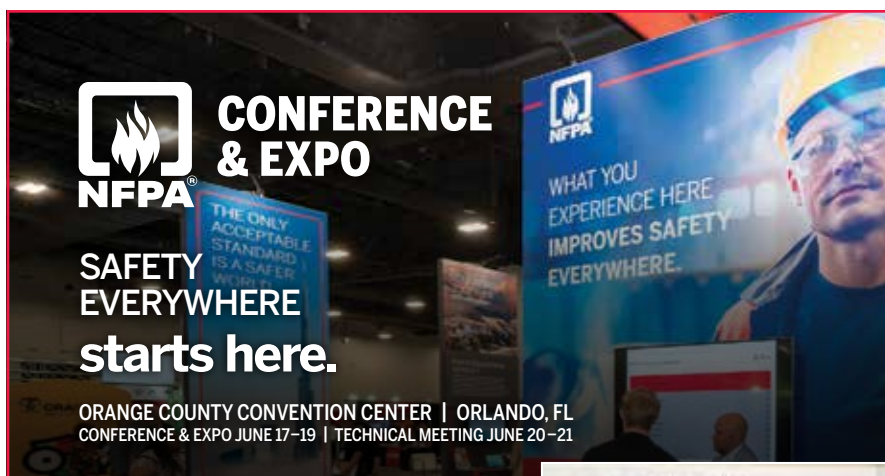
ABC and its Florida First Coast chapter filed the lawsuit in the U.S. District Court for the Middle District of Florida in Jacksonville in response to the Federal Acquisition Regulatory Council’s December 22, 2023, final rule.

Learn more at: www.abc.org/bidenpla-faqs, and the Build America Local coalition website: www.BuildAmericaLocal.com.

National

Construction Job Openings

The construction industry had 441,000 job openings on the last day of February, according to an Associated Builders and Contractors (ABC) analysis of data from



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the U.S. Bureau of Labor Statistics' *Job Openings and Labor Turnover Survey*. JOLTS defines a job opening as any unfilled position for which an employer is actively recruiting. Industry job openings increased by 16,000 in February and are up by 32,000 from February 2023.

"The number of open, unfilled construction positions stood at the second highest level on record at the end of February," said ABC Chief Economist Anirban Basu. "This occurred despite the fact that contractors hired workers at the fastest rate since March 2023.

"While these dynamics are emblematic of ongoing industrywide labor shortages, contractors also laid workers off at an elevated rate throughout February. **This suggests a schism in which certain construction segments powered by federal funding and incentives continue to generate tremendous demand for labor, while privately financed segments had somewhat slower growth.** Despite the moderating effect of high borrowing costs on projects reliant on private funding, fewer than 11% of contractors expect their staffing levels to decrease over the next six months, according to ABC's Construction Confidence Index."

California

Fire Sprinkler Designer Salary

How much does a Fire Sprinkler Designer make in California? According to www.salary.com, the average fire sprinkler designer salary in California is \$106,479 as of February 26, 2024, but the range typically falls between \$96,597 and \$116,364.

Salary ranges can vary widely depending on the city and many other important factors, including education, certifications, additional skills, and the number of years you have spent in your profession.

Missouri

2027 Deadline for Fire Sprinkler Installations

The city of Clayton is under a mandate to equip every commercial high-rise building with a fire sprinkler system by 2027, officials announced. Failure

to meet this requirement could result in the city facing fines of \$1,000 per day. Clayton sets 2027 deadline for fire sprinkler installation. This according to an item by Joe Millitzer, posted April 2, 2024, on www.fox2now.com.

This move is part of a broader safety initiative aimed at enhancing fire protection in the city's towering buildings. The announcement comes as St. Louis County Executive Sam Page prepares to meet to deliberate on the deadline and the associated efforts, including the renovation of the Roos administration building.

The cost of renovating the existing administration building is pegged at \$175 million and leasing a facility would cost Clayton approximately \$340 million. However, building a new Public Safety and Administration building is estimated at \$562 million.

The discussions and their wider implications for the city's budget and safety priorities will probably have an impact on the decision regarding how to proceed.

Oklahoma

Great Meet Success

The 6th Annual Boondoggle of the Oklahoma Fire Sprinkler Association took place at Hard Rock Hotel & Casino in Tulsa, April 3-5, 2024.

This event included golf, their annual conference, workshops, vendor show, and dinner reception.

The OFSA is grateful to all of their wonderful sponsors!

The golf event took place at the Cherokee Hills Golf Club. Congratulations to the Winners: Randy Schott, Terry Whitely, Mike McKinney, Kyle Chism; Emily Biernacki, Caleb Crick, Matt Cantu, and Garrett Callahan; and Bubba Graves, Kyle Hansen, Eric Stehm, and Nick Phillips.

Honorable Mentions go to: JTC Blue Trades/American FIRE Supply Team, Potter Signal/Viking SupplyNet Team, Kanske Fire Team, Ferguson/Frazier Fire Team, Ameripipe, Total Pump Solutions/Tornatech/Forge Global, General Air Products/Victaulic/Zurn, Control Fire Systems, NFSA/Reliable/OK Group, Kanske Fire Protection/Wheatland Tube, Marmic Fire/APS Co./Victaulic, Gen II Fire Protection/Victaulic, Ferguson/FPS Technologies, C-Aire Compressors/OK



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The agenda included the following breakout sessions: “Fire Sprinkler Inspection Class” by Vince Powers, NFSA; “Fire Pump Class” by Alex Hall, Total Pump; “PRV Class” by Johnathan Carl, Victaulic; “Fire Sprinkler Inspection Course” by Vince Powers, NFSA; “High Piled Storage/ESFR Class” by Alan Larson, Reliable; “Fire Pumps & Water Storage Tanks” by David Scroggins, Geo Systems; “Lithium Ion Class” by Brett Seggerman and Nicholas Brondum, Poole Fire Protection.

For more information contact: Oklahoma Fire Sprinkler Association, P O Box 1585, Norman, OK 73070 -1585; okfiresprinkler@gmail.com, <https://ofsa.info>.

Washington

Pye-Barker Acquires Pacific Fire & Safety

Pye-Barker Fire & Safety has acquired Pacific Fire & Security, a comprehensive fire alarm and security systems provider

in Seattle, Washington. This acquisition marks an important step in Pye-Barker’s expansion along the West Coast and puts the company closer to achieving its mission to be the national provider of choice for full fire code compliance.

“We’ve always held safety and integrity as our guiding stars, and I’m excited that Pye-Barker shares these values,” said Rob Vaughn, Pacific Service Manager.

Pacific Fire & Security offers end-to-end services – including 24-hour monitoring, testing, maintenance, installation, design, and consultation – for fire alarm and security systems. The team provides surveillance, CCTV, access control, and integrated alarms for commercial, retail, healthcare, and multi-family customers.

With code compliance in mind, Pacific’s team tests and maintains a full suite of life safety systems including alarms, **fire sprinklers**, backflow preventers, extinguishers, kitchen hoods, emergency lighting, and mass communication systems. At the heart of Pacific is an unwavering commitment to the critical systems that protect lives and livelihoods.

“At Pacific Fire & Security, we’ve always held safety and integrity as our

guiding stars, and I’m excited to see that Pye-Barker shares these values wholeheartedly,” said Paul Dalton, Pacific Owner and President. “It’s not just a business move; this new chapter is all about exciting opportunities for our employees and additional services for our customers, while staying true to who we are.”

“The Pacific team is made up of individuals who are passionate about their craft and are dedicated to the important work of keeping customers safe from fire and security threats,” said Bart Proctor, CEO at Pye-Barker. “We’re proud to partner with them on our mission to protect every community from coast-to-coast.”

Paul Dalton and the highly qualified Pacific team will continue to serve customers in the Seattle area.

About Pye-Barker Fire & Safety:
A U.S. leader in fully integrated life safety systems, Pye-Barker Fire & Safety provides complete fire protection and security systems nationwide. With over 200 locations and 6,000 team members nationwide, Pye-Barker ranks No. 954 on the Inc 5000 and No. 9 on the SDM 100.



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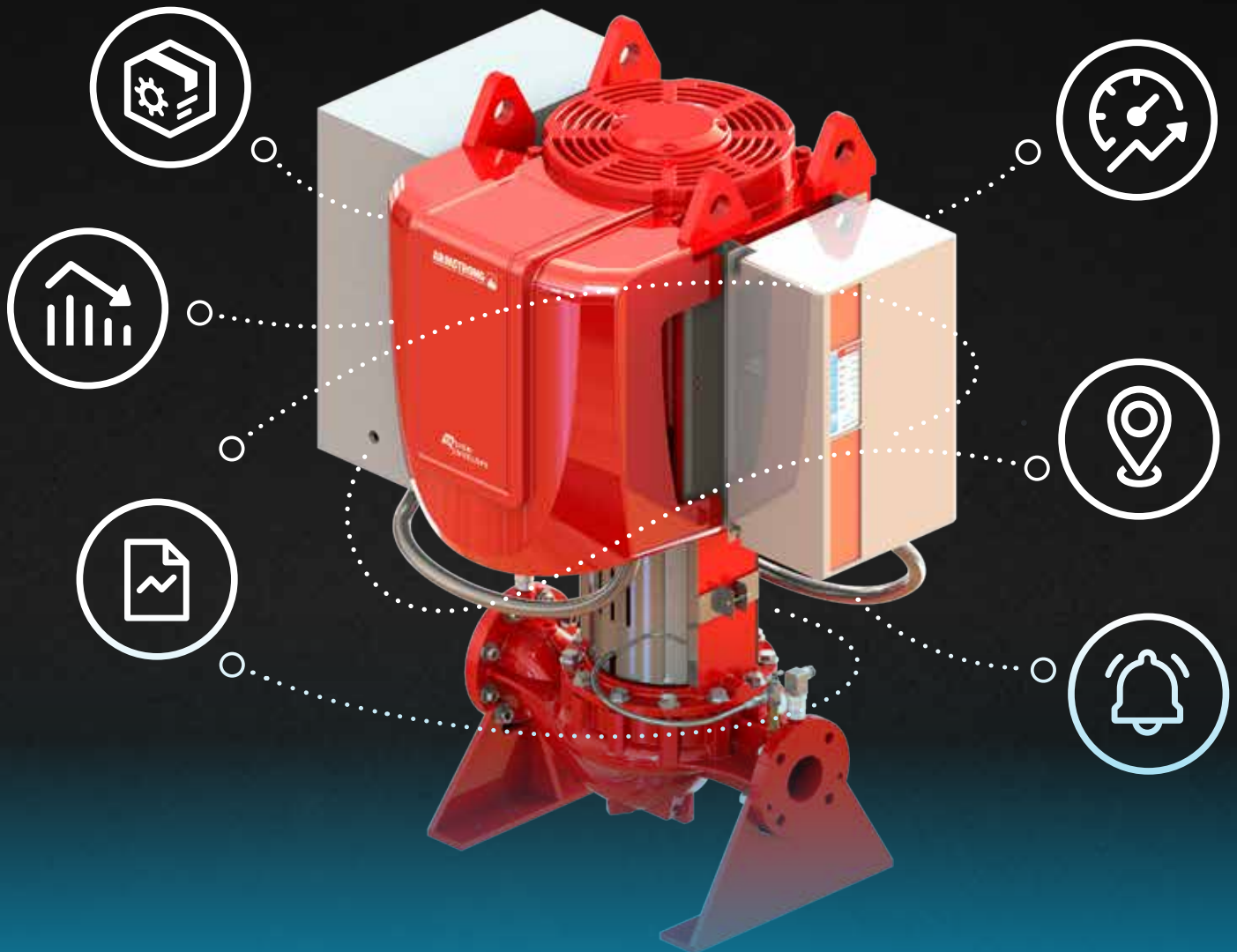
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The Breakaway Hanger is engineered to support the Fireloop® seismic expansion joint during regular operation and “break away” at a preset load during a seismic event.

The Fireloop® expansion joint is capable of movement in all directions with sizes able to accommodate movements up to $\pm 45^\circ$. It should be installed anywhere building or pipe movement is expected, including seismic, thermal growth, and building settlement.

The clearance between the Fireloop® seismic expansion joint and the structure must be a minimum of 12", or two times the seismic movement. For installations where there is insufficient clearance between the joint and the structure, the compact design of the Seismic Breakaway Hanger is used to ensure that the joint will survive a seismic event.

An optional cable tether is available. This cable tether supports the joint after the Breakaway Hanger has been activated, allowing full-rated movement while providing additional support.

Selecting the right Breakaway Hanger model is easy. Simply provide the size and movement specifications of your Fireloop® seismic expansion joint, and Metraflex will supply the appropriate Breakaway Hanger. A sizing chart to assist you in

making the correct selection can be found at: www.Metrafire.com/SBH.

The Seismic Breakaway Hanger is crucial to making large movement “Base Isolation” systems work since there is seldom enough room to provide proper clearance. To prevent sagging in long, flexible legs of a seismic expansion joint, Metraflex offers support saddles. These saddles eliminate the need for custom support and help maintain optimal functionality of the joint.

To learn more about the Seismic Breakaway Hanger and its benefits, and to see a demo video on how it performs during a seismic event, please visit: www.Metrafire.com/SBH; or e-mail Sales Manager Bradley Board at: bradb@metraflex.com.

Metraflex is ready to provide you with the information and support you need to enhance the safety and reliability of your fire protection systems.

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Best Practices: Using Flexible Assemblies in Fire Sprinkler Systems

By Rob Stewart

Fire sprinkler manufacturers are constantly bringing new products to the industry. It is hard to keep up to date with new products. One of the materials that is very common on jobsites today is the use of flexible assemblies, generally referred to as “flex drops,” for sprinkler head installations. We have also seen many changes to the product over the years, like improved braided flex lines and brackets for every ceiling option including duct protection. We see dry sprinklers with flexible assemblies. More recently, we see flexible assemblies that can be used for the difficult angles we deal with in building construction.

These are just some options out there when it comes to flexible assemblies for fire sprinkler systems.

When it comes to best practices and the products we use in our systems, it is important to remember the phrase “Details Matter.” Details matter so much in our industry. Let’s start with a couple of NFPA definitions: “Listed,” “Approved,” and “AHJ” are key words when using and installing materials in a fire sprinkler system.

How does NFPA define these terms? This reference is from NFPA 13 2022 Chapter 3.

3.2 NFPA Official Definitions:

3.2.1 * Approved. *Acceptable to the authority having jurisdiction.*

3.2.2 * Authority Having Jurisdiction (AHJ). *An organization, office, or individual responsible for enforcing the requirements of a Code or Standard, or for approving equipment, materials, an installation, or a procedure.*

3.2.3 * Listed. *Equipment, materials, or services included in a list published by an organization that is acceptable to the authority having jurisdiction and concerned with evaluation of products or services, that maintains periodic inspection of production of listed equipment or materials or periodic evaluation of services, and whose listing states that either the equipment, material, or service meets appropriate designated Standards or has been tested and found suitable for a specified purpose.*

A key point to remember when establishing best practices is to keep in mind that even though a product is listed for fire sprinkler systems, it is not necessarily approved. In order for a

product to be approved, it has to be acceptable to the Authority Having Jurisdiction (AHJ). While most of the products we use on a daily basis are approved, I go back to the phrase “Details Matter.” For example, when a new product comes out, we see that it is listed, our supplier has it in stock and it will

work perfectly for this upcoming project, we buy it, and install it. The AHJ shows up for the inspection and calls us out on it. Why? The AHJ may just not be familiar with the product, may want more information, or just has questions. Most of us have been in this situation so a best practice could be “Don’t surprise the AHJ with new

products at the inspection.”

How does this relate specifically to flex drops and similar products? Manufacturers are improving these products, which means the details on the products are also changing. Here are some best practice suggestions.

- 1) Schedule a coordination meeting when the intent is to use a new or updated product. Purchasing can coordinate with the design team, allowing the design team to understand any design ramifications to projects such as hydraulic calculation concerns. This is an important consideration when it comes to flex drops.
- 2) The design team will also need to provide all manufacturer submittal sheets when applying for approvals with the AHJ. We should address the materials being used upfront with the AHJ, so that there are no surprises when it comes to inspection time.
- 3) Purchasing will need to make sure they are buying the exact flex drop (manufacturer, model, size, etc.) that is on the approved drawings.
- 4) Correct installation instructions should be shared with the fitters so they know of any limitations that the product may have (such as the number of bends the flex drop can have).

Our industry sees improvements everyday regarding how and what we install, inspect, test, and maintain. Please remember that the “Details Matter.”

About the Author:

Rob Stewart is the Training Manager at Fire Tech Productions. He can be reached at: (937) 434-3473, Rob@firetech.com.

A Situation With a Seismic Joint

By Eduardo Lopez

Pipes must have flexibility of movement in the event of an earthquake. NFPA and FM Global each have requirements to accommodate this flexibility. We currently have a project being carried out in a city with an earthquake occurrence every 50 years, according to FM Global.

We know that when there is a change in structure, an expansion joint must be put in place. But what do the rules really say regarding this flexibility?

NFPA Section 18.3.1 indicates that “crosses buildings seismic separation joints at ground level and above,” it is interesting what it says, seismic joints in the structure, it does not speak of a crossing between the building and a mechanical room at a lower level.

Global FM 2.2.1.4.8: *Install seismic separation assemblies; or FM Approved flexible pipe loops, or flexible pipe or fittings; that allow adequate earthquake movement in two orthogonal horizontal directions as well as vertically on all fire protection system piping that crosses a building seismic expansion joint, or other separation between or creating two independent buildings or structures, above ground level. Other engineered methods that provide a comparable degree of flexibility in all three directions may be acceptable. Also see further commentary in Section 3.1.10.*

Both documents indicate that a seismic joint must be placed when the piping crosses a building seismic expansion joint, but FM Global goes further, indicating that it also applies when they are separate buildings or different structures.

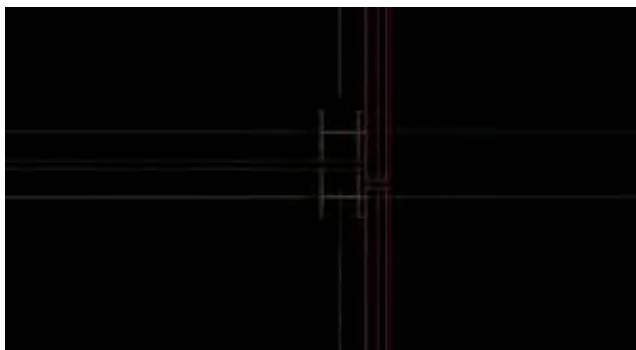


Figure 1

In Figure 2 we see a seismic joint in the structure within the same building. The building is one, the outline or walls, but the structure is divided into two.

In Figure 3 we can identify the seismic joint of the piping for two different buildings. On the left side you exit a parking lot and on the right side you enter a building.



Figure 2



Figure 3

The project that we mentioned at the beginning was reviewed by FM Global. The consultant identified that a sprinkler system that feeds an external room attached to the building should have a seismic seal. And it is correct, the structure of the external room, although it is attached to the main building, is different from the main structure (see Figure 4).

It is true that the FM Data Sheet includes the seismic joint in that building change. The consultant was asking for the seismic joint to be placed up and down – up before lowering the feed piping and down when entering the lower room (see Figure 5). In the data sheet, it asks for one joint and not two.

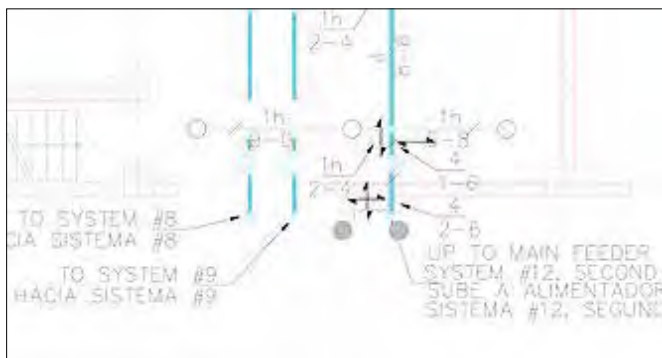


Figure 4

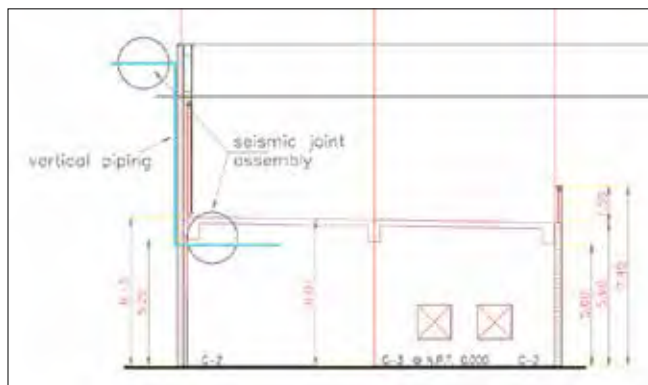


Figure 5

We were checking because the consultant requested two seismic joints and not one. We had three issues:

1. This is what FM DS2-8 says. We can't find where it says an up and down should go.
2. Interpret that the wall is a third structural element that will move independently and therefore must see a seismic joint between the main roof and the wall, and another seismic joint between the wall and the roof of the exterior room.
3. You want to ensure that there will be no failures in the system. In this case, we consider it to be a kind of insurance against failure insurance.

The data sheet in section 2.2.1.4.8 also indicates that flexible piping or accessories can be used, in this case, flexible couplings that allow movement of the vertical piping connecting the two areas.

It is not bad to place two seismic joints. We ascertained that one seismic joint is required and not two, and that flexible couplings can be placed so that the vertical piping has adequate movement when there is an earthquake. It is very important to talk with a consultant to identify what he is seeing that we are not seeing. What is important is to place seismic devices and flexible couplings in seismic zones.

About the Author:

Eduardo Lopez is a licensed engineer (NICET #130312, CFPS 4229, CETRACI S03983714) with Baja Design Engineering in Mexicali, Baja California. He may be reached at: Office: +52 (686) 905-9855, Cell (427) 290-9839, elopez@bajadesign.com.mx.

References:
NFPA 13 Edition 2024
FM Data Sheets DS 2-8

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Innovating Flexible Piping Solutions Since 1919

By John M. Stempo

In recent years we have all experienced an increase in demand for flexibility – whether it be with flexible work arrangements, maintaining a flexible mindset towards a new way of doing business, or the need to be more flexible in today’s society – the same holds true with the ever-increasing flexible piping solutions for fire protection systems. From flexible sprinkler hose fittings to expansion joints to flexible dry sprinklers, there are a multitude of options on the market today that can satisfy system requirements as well as solve unique challenges. But there is one tried-and-true, original flexible piping workhorse that continues to deserve the spotlight.

Since their original deployment during World War I and even more prolifically in World War II during the Allied invasions in Europe, Victaulic mechanical pipe couplings became known to the fire protection industry in the early 1950s. The first UL Listing of these mechanical pipe couplings was achieved in 1952 by Victaulic Company for its original flexible coupling, pioneering a disruption to the traditional way fire protection piping was assembled. Shortly thereafter in 1954, Factory Mutual Laboratories (now known as FM Approvals, LLC) issued the first FM Approval to Victaulic for its flexible pipe couplings for joining grooved-end steel pipe and components for fire protection service.

To support the approval of these products, a series of unrestrained hydrostatic pressure tests were conducted at each agency’s laboratory to multiple safety factors. Also, the origi-

nal test regimes included flexural tests that deflected the pipe joint to its maximum angular deflection while under its maximum pressure rating. The purpose of this test was two-fold; 1) to simulate the performance of the pipe joint under a common

“The flexural test (bending moment test as it is known today) ensures the flexible pipe coupling can withstand high stress loads without leakage and allow angular deflection, as per the manufacturer’s design criteria.”

installation scenario where the flexible coupling must remain leak-tight when assembled and anchored in place at its maximum deflection angle; 2) to simulate a scenario if in the event a pipe hanger at twice its maximum spacing were to fail, the coupling is required to withstand the resultant bending forces of the full

span of twice the water-filled pipe without leakage, rupture, or otherwise damage to the pipe joint assembly. This performance criteria would eventually evolve into UL 213 and FM 1920, the current UL and FM *Standards* used to certify mechanical pipe couplings for fire protection service.

Fast forward nearly 75 years, and while these *Standards* continued to evolve to permit lighter wall pipe as well as other industry requirements and technological advances, the core test methodology has remained relatively unchanged. The flexural test (bending moment test as it is known today) ensures the flexible pipe coupling can withstand high stress loads without leakage and allow angular deflection, as per the manufacturer’s design criteria. During a severe natural disaster event such as an earthquake, the pipe joint experiences a worst-case stress condition from the seismically generated accelerations, loads, and forces that would be imparted to the piping system from the differential building movement. For these reasons the bend-

ing moment test is of critical importance to qualify a coupling for fire protection service and has remained one of, if not the most, important benchmarks in these certification *Standards*.

Since their initial introduction, flexible couplings have been utilized to successfully solve many design and installation challenges. This includes accommodating thermal expansion/contraction of piping, building settlement, vibration attenuation, allowing pipe offsets for designed pipeline curvatures (e.g., tunnels and stadiums), and most critically, usage on risers and other piping system areas for seismic protection. In fact, FM Data Sheet 2-8 and NFPA 13 have included seismic design criteria for flexible couplings since at least the late-1990s, recognizing the performance capabilities of these products. Following the devastating 1994 Northridge earthquake in California, many industry professionals, researchers, insurance companies, and government officials, including those in fire protection, sought to enhance the codes and standards that outline seismic protection criteria. As part of that effort, Victaulic was one of the lead manufacturers determined to further support this with real-world test data.

Through a partnership with Lehigh University, an internationally recognized research institution with the capability to simulate seismic events, large-scale testing was conducted on

several piping arrangements using “worst-case” seismic conditions. Three separate pipe assemblies (4", 8", and 16" diameter) using multiple flexible couplings in each were installed and pressurized on the large-scale shaker platform and seismi-

cally tested to conditions that exceeded the 1994 Northridge earthquake ground acceleration measurements. In all cases, the flexible coupling joints and the complete piping assemblies remained intact and leak-free throughout the tests.

For nearly a century of successful installations and ongoing performance testing of flexible couplings, it is clearly evident these products will continue to remain an essential element of fire protec-



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tion piping well into the future.

For additional information and video footage of the seismic testing, please visit Victaulic’s website and YouTube channel.

About the Author:

John M. Stempo is Manager of Global Regulatory Compliance at Victaulic Company. He holds a B.S. in Mechanical Engineering from Lehigh University and has over 18 years of experience with product development and regulatory testing and approvals in the fire protection industry.

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SCAN ME

Tenant Improvements

Finding the Right Technology to Streamline Sprinkler Modifications

By Alaina Schwall

Tenant improvement (TI) projects, also known as “leasehold improvements,” are prevalent in the commercial real estate industry. Leased spaces are rarely equipped to meet the needs of their new tenants. Even if they are, business owners typically want to modify the space to reflect their preferences and brand promise. Tenant upgrades may include adding or removing walls to create a new layout, changing ceiling heights, and upgrading or installing new electrical, plumbing, and HVAC systems.

Any of these changes can impact the original fire protection system’s effectiveness, and contractors must address the issues before the space is operational. During these retrofit projects, fire protection contractors often redesign the sprinkler system to ensure the new space is safe and compliant with current fire codes and standards.

“These factors can make modernizing a sprinkler system in an older commercial space complex and labor-intensive. Thankfully, fire protection technology has advanced since the 1980s.”

Common Fire Protection Challenges During Tenant Improvement Projects

On average, U.S. commercial buildings are over 50 years old, according to a study by SMR Research Corporation, a company recognized for producing nationwide real estate data.

It’s important to understand two critical pieces of information about this:

1. Sprinkler technology in the 1980s and prior primarily used K5.6 and K8.0 orifices. Modern fire protection codes and standards require contractors considering a replacement to install new sprinklers that are within 5% of the original orifice size.
2. Many older buildings have hard pipe fire protection systems. Reconfiguring a hard pipe system often requires additional planning and coordination, as contractors will need to cut and add fittings and pipe to relocate sprinkler heads. In these cases, contractors must recalculate system hydraulics to ensure adequate water flow and pressure in the new system.

These factors can make modernizing a sprinkler system in an older commercial space complex and labor-intensive. Thankfully, fire protection technology has advanced since the 1980s. Engineers have created and iterated on solutions to simplify retrofit projects, benefiting both the contractor and owner with cost- and time-saving advantages. Flexible sprinkler assemblies are one of the technologies at the forefront of that development.

Technologies That Simplify Hydraulic Recalculations

Recalculating hydraulics is the most prevalent challenge sprinkler contractors face in tenant improvement projects. Hydraulic recalculations look different depending on the products and solutions a designer chooses:

- Hard pipe and fittings require calculating friction loss for each foot of pipe and fitting in the reconfiguration.
- Flexible hoses require accounting for the equivalent length of schedule 40 pipe in feet or calculating friction loss from the hose.



*When using hard pipe and fittings to modify sprinkler systems, designers must calculate friction loss for each foot of pipe and fitting in the reconfiguration.
(Credit: Victaulic)*

- Flexible sprinklers do not result in additional friction loss past the branch line outlet, and, therefore, usually do not require recalculation.

Flexible Hoses

Altering a threaded hard-pipe system is a multi-step process that involves measuring, cutting, preparing, and threading additional pipe components on site. System designers must account for the pressure loss due to friction of the pipe and fittings. Any adjustments made at a later stage of the project could further complicate the calculations.

Flexible hoses, such as Victaulic's Series AH2-CC Hose, simplify the design and installation process in multiple ways. First, the hose's bend radius eliminates the need for precision pipe layouts and additional materials to ensure sprinkler head alignment in the correct ceiling position. Second, system designers only need to calculate the pressure losses due to friction of the flexible hose, as opposed to each new joint.

Flexible Sprinklers

Fire protection experts and manufacturers are continually developing new technology to further streamline sprinkler design and installation, leveraging earlier advancements in fire protection, such as flexible hoses.

In 2023, Victaulic released its VicFlex™ Series VS2 Standard Coverage K5.6 sprinkler, a flexible sprinkler that incorporates a flexible hose, sprinkler, and coupling into one flexible sprinkler assembly. The all-in-one flexible sprinkler is engineered to account for pressure and flow loss through the hose and ensure the sprinkler will still deliver the performance of a standard spray K5.6 orifice regardless of its final location.

The flexible sprinkler assembly design is particularly useful in retrofit applications because it effectively eliminates the need for equivalent length calculations. Since its release, Victaulic has seen the Series VS2 flexible sprinkler assembly used with sweeping success to simplify retrofit projects. Recently, contractors in Texas used the technology to efficiently convert a CPVC system to steel pipe at a 50-story high-rise building. Considering the flexible sprinkler assembly's success at this scale, it's easy to imagine the benefits it can bring to tenant improvement projects.

Facilitate Installation In Changing Layouts

Replacing hard-piped sprinklers with flexible hoses and sprinkler assemblies also yields advantages during the installation process. The solutions provide contractors with more flexibility and control over their projects since less planning is required to get sprinklers into exact positions to meet fire codes and standards, such as adequate coverage. The hose can be

routed around obstructions with minimal materials, which is especially advantageous if space constraints in the ceiling require sprinkler relocation. In addition to its fast installation, the single connection point on a flexible sprinkler assembly drastically reduces potential leak points and installation error risk. Lastly, grooved connection options offer the additional benefit of easy on-site installation without the shavings, oil, and mess that comes with threading.

“Fire protection experts and manufacturers are continually developing new technology to further streamline sprinkler design and installation, leveraging earlier advancements in fire protection, such as flexible hoses.”

Minimize Iteration In Future TI Projects For Long-Term Success

As the commercial industry evolves to adapt to emerging market trends, tenant improvement projects will remain a prevalent need. By embracing new technology, system designers and installers can effectively streamline their current scopes and compress schedules without compromising quality. When the time comes to upgrade those systems again for a new tenant, the groundwork will be in place for a smoother process, even as systems grow more complex.

About the Author:

Alaina Schwall is a Fire Protection Product Manager at Victaulic, a leading global provider of mechanical pipe-joining, flow control, and fire protection solutions for the most complex applications. Alaina holds a bachelor's degree in aerospace engineering from Purdue University and NICET I certifications in Water-Based Systems Layout and Inspection and Testing of Water-Based Systems. Contact her on LinkedIn and learn more at: www.victaulic.com.



The VicFlex Series VS2 Standard Coverage sprinkler is engineered to account for pressure and flow loss through the hose, eliminating the need for equivalent length calculations during sprinkler modifications.
(Credit: Victaulic)

Flexible Pipe Fittings

By Adam Tuomala

I am a big proponent of flexible fire sprinkler drops for both new and remodel projects. There are many obvious advantages to using these types of products, particularly in their efficiency and ease of installation.

Example: As far as efficiency, our installation time has been as little as nine minutes per head, including bracket installation with the head piped to center of tile. To put that into perspective, we have done 25 head add/relocates, hard pipe to flex drop projects in under four hours (installation time).

With that being said, I need to qualify how we approach these types of installations. I have all of the Sch. 40 drops pre-fabricated. I prefer to use 45° fittings or straight couplings on the drops. The use of a 45° fitting can greatly assist in reducing bends on the flex whips, provides a little further reach, and makes for a much cleaner installation. Obviously, other fittings may be required, but, in general, this configuration works well.

I also prep the flex drops and the sprinkler heads in advance. This saves a lot of time in the field and is much easier if you perform this task in a workshop environment. Semi-recessed heads can be aligned with the flex nipple, and the sprinkler frame can be easily aligned in the grid.

Some other things that I look for when I'm surveying a project are the branch lines and arm-over orientations. Sometimes you may be able to spin arm-overs or the entire branch line, saving time and fittings rather than potentially installing a return bend (less leak potential, too).

Some disadvantages to using flexible sprinkler drops is that some can be hydraulically demanding. This can be an issue,

especially if you didn't design the original system or have the original installation drawings. Occasionally, the as-builts or backgrounds are available.

I have found that some AHJs are skeptical when they see flexible drops in your submittals (and rightfully so). Be sure to include the data sheets for the exact flexible drops you intend to use, as they vary widely in terms of friction loss, number of bends allowed, acceptable bend radius, factory installed fittings, field installed fittings, etc. With all that being said, I think these products are superior in terms of installation efficiency and easily pay for themselves.

In short, there are many flexible products available in our industry today; from sprinkler flex drops, seismic solutions, suction hoses, and expansion joints. I would encourage you to investigate whatever your needs may be, there is probably a product available for the application.

Some "Quotes" that I've heard in the past...

"The pipe's not stupid - YOU ARE!"

"A little knowledge can be very dangerous."

"It takes the same amount of time to cut the pipe correctly."

About The Author:

Adam Tuomala is NICET IV, WBSL, RME-G, SCR-G, ECR, FEL-K, and the owner of Phoenix Fire Protection located in Lago Vista, Texas (Austin region). He can be reached at: phoenixfirepros@gmail.com, www.phoenixfirepros.com.

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The Last Six Feet and Beyond: Easyflex and Metraflex are “Flexing” With The Latest in Flexible Piping

By Tom Savage

As a contractor, the choices made by the sprinkler designer impact material costs, inspection costs, and, most importantly, the installation labor costs. It's no secret that if the designer picks a product or creates a design that can't be installed efficiently, the fitters will be the ones that pull the project out of the so-called dumpster. But it's 2024, and there is a way to avoid all that pain. Since the 1990s flex drops have been the most impactful innovation in fire protection to help contractors better manage installation costs and keep projects on track.

Some industry experts have said that 2010-2017 was the most innovative time for flex drops. Starting in 2010, we saw the introduction of the tall brackets, the identification sleeve, and the first use of 1" diameter couplings for branchline connections. While it may seem like flex drop innovation has stalled since 2017, this article will show that in fact in 2024 innovation is accelerating.

Today, innovations are coming from smaller, more focused companies with products such as EasyFlex® fittings, and Metraflex Firestrait® flexible pipe. These companies know that it isn't about how big your marketing effort is. What matters in 2024 is the size of a company's commitment to helping contractors do more with less by challenging the status quo.

Following are three important flexible pipe innovations that every contractor should add to their job boxes in 2024:

1. Next Level Hydraulic Performance: EasyFlex® Ultra Performance (UP) Flex Hose. While sometimes names can be deceiving, in the case of Easyflex's Ultra Performance (UP) the name is spot on. When it comes to number of bends, hose flexibility, and the always critical water flow numbers, the EasyFlex UP hose is unmatched (*Figure 1*). With a both UL Listing and FM Approval, this product makes it easy for the de-

signer and the installer to use with clear and intuitive Submittal information. Thanks to the large 1¼" ID braided stainless steel hose design, the UP product delivers better flow compared to the leading alternatives. If you are a contractor in California, New York, Chicago, or any area with a large retrofit market, EasyFlex designed the UP product for you. The UP product can be installed to replace standard hard pipe arm-overs and can eliminate the need to recalculate the system. And unlike other flex drops, the UP product can be used with any manufacturer's sprinkler head. You and your fitters can continue to use the fire sprinkler brand you like best. Even better, if you prefer to use couplings to connect to the branchline, Easyflex has you covered with a standard groove style (yes, standard groove) branchline connection. Isn't that refreshing?

2. Leave The Hex Driver At Home: No-Tool center bracket innovation. As someone who has multiple patents in the flex drop space, I have experience identifying when something is truly beneficial for sprinkler fitters. With their new Open Gate Snap Bracket (OGSB-02), Easyflex introduces innovations in design and ease of connection to the ceiling grid (*Figure 2*). The most significant innovation for the sprinkler fitter is the unique center bracket design. With the OGSB-02 bracket, the fitter simply locks the reducer in place much like how ski boots snap closed. No more set-screws, no more hex screws, no more tools! This innovation is designed to reduce installation fatigue and speed up installation. When hours on the job are the largest uncertainty, it is innovations such as these that truly bring value.



Figure 1: Easyflex's Ultra-Performance flex hose is available in a range of lengths and with threaded (L) or standard groove branchline end (R) models.

Photos courtesy Easyflex, USA.





Figure 2: Easyflex's new Open Gate Snap Bracket (OGSB-02) (L) has a unique snap-in center bracket (R) and eliminates the need for a tool to secure the reducer.
Photos courtesy of Easyflex, USA.

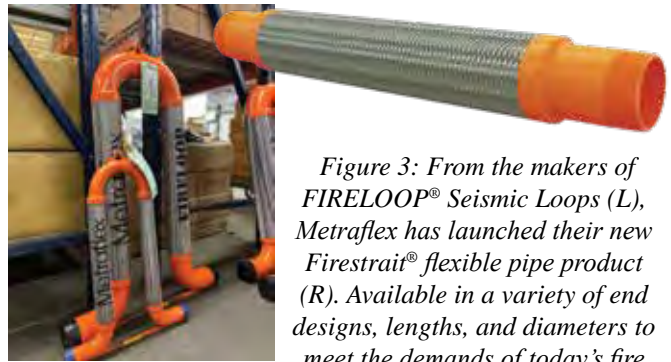


Figure 3: From the makers of FIRELOOP® Seismic Loops (L), Metraflex has launched their new Firestrait® flexible pipe product (R). Available in a variety of end designs, lengths, and diameters to meet the demands of today's fire sprinkler system designs.
Images courtesy of Metraflex, Inc.

3. A Seismic Shift – Flex Pipe Has Finally Arrived: Metraflex's FIRESTRAIT® Flexible Pipe. If you have been in the fire sprinkler industry for any time, you are familiar with the innovative flexible FIRELOOP® seismic loops from Chicago-based Metraflex, Inc. It is no surprise that Metraflex was the first to introduce flexible pipe. That's right, now you can buy and install flexible pipe in diameters up to 6". This new product is an awesomely powerful tool for your designers and fitters. With the Firestrait flexible pipe (Figure 3), you can now use a single piece of pipe and 2 one-bolt Quikfitt® couplings from Modgal (or the coupling of your choice) to address pipe offsets. Other applications include floating docks where flexibility is crucial. With Firestrait flexible pipe, contractors can finally free themselves from needing to stock, or rush-order, those annoying special angle fittings when field conditions reveal slight pipe offsets.

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About the Author:

Tom Savage is an author, global speaker, inventor, distributor, and vlogger about all things fire protection. Each day, Tom's flex drop inventions are installed by industry leading fire sprinkler fitters around the world.

In 2019, Tom founded Savage Fire & Life Safety Products, LLC dedicated to representing companies and distributing products that are as original as he is.

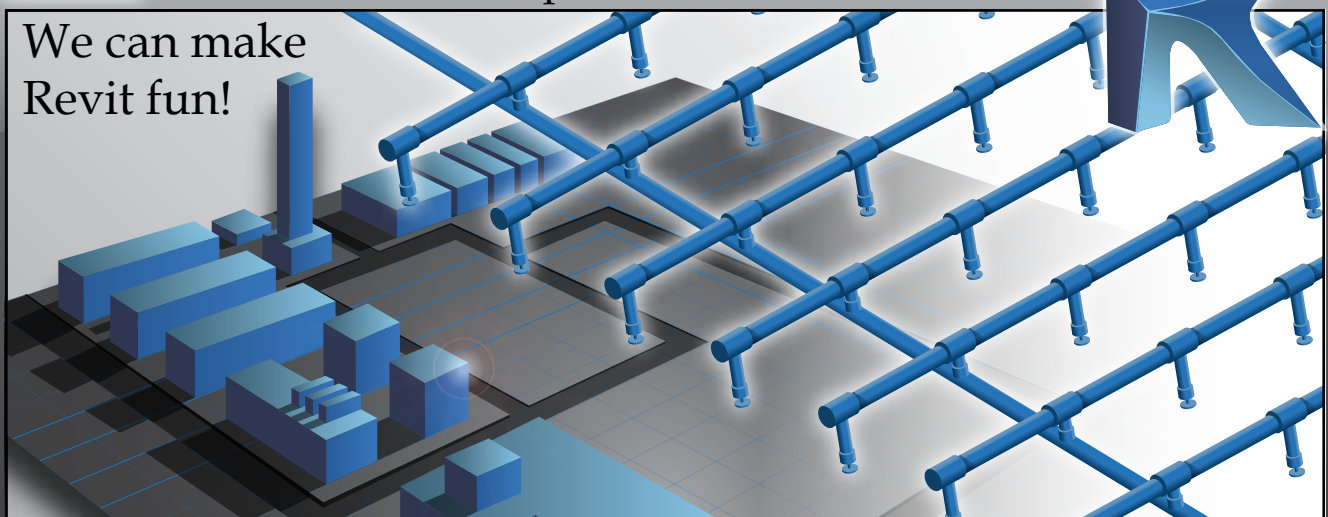
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Help AFSA Help You

Sprinkler Fitter Apprenticeship Programs

By Bob Caputo, CFPS
American Fire Sprinkler Association

We all know the weakest link in the chain of success for this industry is a lack of qualified and trained people. In fact, I recently had a member tell me that they have such a hard time finding people to hire, they now encourage long-haired, freaky people to apply. Yes, there are members who could grow at a faster pace with better funding or working capital, but, at its core, the Achilles heel for most AFSA members continues to be qualified field labor and well-trained layout technicians. I'm sure many of you are tired of hearing (or reading) me beat this drum. What many of you may not know is that I am a drummer, and as such, you get the picture.

AFSA has expanded many training programs, especially for sprinkler fitting apprentices, with our Virtual Instruction Program (VIP). This program is designed to allow employers to focus on the OJT (field training) part while AFSA delivers the classroom portion in the hope of creating better pathways for success in terms of training and retention to benefit the employers and employees. (AFSA is always looking for additional qualified trainers.)

Our fitter apprenticeship program has always experienced some drop-off candidates, especially following book one, based on some deciding being a fitter isn't a good fit for them (pun intended) or perhaps better opportunities came along. Regardless, with good hiring practices up front followed by a sincere interest shown by employers who encourage and reward progress and retention, we should see better results in this area... we are not. So where are the problems, and what are the solutions?

Let's start with the concerns I've shared many times related to hunters and gatherers versus farmers as it applies to developing people for our industry. Some companies invest in training programs for long-term gains (farmers), while others often pick off the fruits of their labor before that fruit has had time to ripen (hunters and gatherers). In plain English, those companies with short-term vision hire (poach) undertrain people, and offer higher-than-deserved pay rates to solve their short-term, immediate need to get a job done. I think we all understand why this happens, but in the bigger picture, that practice is hurting our industry, and I urge those who practice this to reconsider the sustainability of it.

Under-trained and overpaid workers are increasing your liability and holding your entire company back in terms of long-

range growth and profitability. Investing in training people for long-term productivity and sustained knowledge will help you drive success. In addition, ask yourself, as leaders, managers, or business owners, where you came from. How did you start in this industry, and what were the building blocks to your suc-

cess? We all know fire sprinkler company owners who started as fitters or designers/technicians. Who trained, mentored, and invested in you?

Let's consider the fact that many companies do not take advantage of formal training programs like AFSA's sprinkler fitter

apprentice programs, inspector training and development, or our design schools. In fact, there are a lot of open shop fire sprinkler contractors across the United States who don't belong to AFSA, NFPA, or any trade association. Let's set that group aside for now and focus the conversation on the people I care about the most... our AFSA members. How can we help make our members stronger and better in the long term?

I believe having a formal apprenticeship program for the sprinkler fitting trade is critical to success, especially for merit shop contractors. There is a lot more to installing a fire sprinkler system than just twisting pipe or using an impact driver to make up the bolts on grooved couplings. There is a reason apprentices and certification programs are subjected to 6,000 plus OJT manhours, and balancing hourly labor costs to install systems is not among them. It takes time to learn any trade and to be exposed to enough circumstances and experiences to develop the skills necessary to be called a journeyman or journeywoman.

We are in a constant battle with organized labor and with our own federal government to be considered as equals for government contract awards and accredited programs. When we choose to opt out of real training programs approved by the Department of Labor (DOL), we open ourselves up to the criticisms leveled by groups who would like to see us outlawed, banned, and banished from major projects and government-funded work – projects funded by your tax dollars. To expedite the DOL registration process for our members, AFSA has registered our sprinkler fitting curriculum as National Guideline Standards (NGS) with the DOL. This essentially gets your apprenticeship program halfway to the DOL-registered finish line. You, as the employer, can work with your local DOL representative to fill in the blanks (on items like wages, reporting, hiring, etc.) to take your application the rest of the

“I believe having a formal apprenticeship program for the sprinkler fitting trade is critical to success, especially for merit shop contractors.”

way resulting in a federally registered apprenticeship program.

Like any program, our new VIP classroom training has had a few people fall behind in their expected progress, including exams. The program anticipated this and provided a contingency by extending opportunities by up to two months for apprentices who need a little extra time to complete each phase of training. However, even with a built-in extension opportunity, we still have a few enrolled apprentices who drop out or, worse, end the formal training but stay on working in the field without proper training.

The solution must start with the employer. Encouraging registered apprentices to stay on course while providing rewards for milestone successes as well as penalties for falling behind or dropping out is the best and simplest pathway to success. These practices will also encourage others to want to get into formal apprenticeship programs. We want to encourage our contractor members to exercise good hiring practices to ensure higher success rates, but we all need to invest in best-in-class training for the strength and longevity of our industry and the merit shop movement.

We are in this together! Your AFSA is here to deliver robust training programs for your company's benefit and long-term health. We need your help to ensure these programs are delivered at the level where they matter most, with your people at the local level. We rely on employers, leaders, and managers to keep your people engaged and on track in enrolled training programs because we here at AFSA do not have any control over them to ensure they stay on track. We are in this together, but we cannot do it alone. Help us help you by taking an active role in ensuring your investment in the people you enroll in AFSA training programs meets their intended outcomes so you, they, and we all enjoy the results and successes we expect.

About The Author:

Bob Caputo, CFPS, President of AFSA, is Chair of the NFPA 24 and NFPA 291 Technical Committees and a member of multiple NFPA technical committees, including NFPA 13 and NFPA 25. Caputo is a contributor of the *NFPA 13* and *NFPA 25 Handbooks*, the *Fire Protection Handbook* 21st edition, and the *NFPA Inspection Manual*. He has written and presented seminars throughout the world on fire protection and life safety systems, project and field labor management, and is a regular speaker at AFSA and NFPA conventions.

Caputo is an instructor at the National Fire Academy and a member of the Industry Advisory Board at OSU School of Fire Protection Engineering & Safety. His industry distinctions include "Fire Prevention Officer of the Year" from San Diego County in 1994; "Person of the Year" from *Fire Protection Contractor* magazine in 1997; and the Henry S. Parmelee award from AFSA in 2017. Caputo attended the University of Albuquerque, New Mexico and is a U.S. Navy veteran and former volunteer firefighter.

For more information visit: www.firesprinkler.org.



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The AGF RiserPACK Model 8511Z is a 2½" floor control assembly. It features a flow switch, pressure gauge with test valve, hose test, TESTANDRAIN valve with pressure relief valve and drain trim, optional stainless steel drain line, and a Pressure Reducing Valve.

www.agfmfg.com

Next Gen: Career Fair

Igniting Passion and Saving Lives: *The Fire Protection Career Fair Sparks Interest in the Next Generation*

By MaryCatherine Coyle



VSC Fire with students



Chris Amorese with Tyco



Karen Thomas with Hydrotec



ACi CAD Demo



Professional Fire and Eagle Fire

On February 27, the AFSA Virginia Chapter held its 3RD Annual Fire Protection Career Fair at the Henrico County Adult Education Center, located at the Regency Mall. The event was a resounding success, drawing around 300 high school students from Henrico County, eager to explore career options in the fire and life safety industry.

The Career Fair showcased the industry's importance in saving lives and protecting property through interactive displays and hands-on experiences. Students had the opportunity to engage with 14 member companies, including industry leaders like VSC Fire-Security, Summit, Eagle Fire, BFPE, Cavalier Fire Protection, Hydro Tec, Aci, Professional Fire, Hiller Systems, American Fire Systems, Ferguson Fire and Fab, Hajoca, Tyco, and Viking. The focus was not just on talking about the greatness of the industry but on allowing students to experience it firsthand.

From tabletop displays of equipment to simulators that activated fire sprinklers, working fire alarm panels, AutoCAD, and 3D design stations, and even Virtual Reality experiences, the Fair aimed to make learning as interactive as possible. The goal was clear: to educate students about the critical role of fire protection systems and to inspire them to consider careers in this dynamic field.

One of the most significant outcomes of the Career Fair was the partnership between the AFSA Virginia Chapter and Henrico County Public Schools. This collaboration has proven to be instrumental in bridging the gap between education and industry, ensuring that students are aware of the diverse career opportunities available within the fire sprinkler industry.

Many students attending the Fair were surprised to learn about the breadth of career options within the industry, with some not even aware that such a field existed. This lack of awareness highlights

the importance of events like the Fire Protection Career Fair in exposing students to potential career paths early on.

Moreover, the Fair wasn't just about showcasing the industry – it was also about providing tangible opportunities for students. Some attended simply to explore, while others were actively seeking summer employment, internships, or full-time positions upon graduation. Regardless of their intentions, all students were warmly welcomed by industry professionals eager to share their knowledge and expertise.

The involvement of manufacturing companies like Tyco and Viking further underscored the industry's commitment to education and workforce development. By participating in the Fair and having product demonstrations, these companies showcased their dedication to nurturing the next generation of fire protection professionals.

As the demand for skilled workers in the fire sprinkler industry continues to grow, initiatives like the Fire Protection Career Fair are more crucial than ever. By igniting passion and providing students with the tools and resources they need to succeed, these events play a vital role in shaping the future of the industry.

In conclusion, the Fire Protection Career Fair was not only a showcase of the industry's importance but also a testament to its commitment to education and innovation. By inspiring the next generation of fire protection professionals, events like these ensure that our communities remain safe and secure for years to come.

About the Author:

MaryCatherine Coyle is the Talent Acquisition Manager at Eagle Fire and Social Media Director for the AFSA VA Chapter.

For more information about the AFSA VA Chapter contact: Steve McGee, Executive Director, exedirafsava@gmail.com, www.virginiaafsa.org.

AGF Model 8511Z Sprinkler Floor Control and Zurn ZW5004 Press Reducing Valve

AGF, a leading provider of innovative fire protection solutions, proudly announced the integration of its renowned, domestically made Model 8511 Sprinkler Floor Control manifold with the Zurn Model ZW5004 adjustable pressure reducing valve, offering unmatched efficiency and reliability for the fire sprinkler industry.

The AGF Commercial RiserPACK Model 8511Z is meticulously crafted in the USA using high-quality schedule 10 pipe, ensuring superior durability and performance. This assembly incorporates the AGF Model 2511 TESTanDRAIN valve with a pressure relief valve and drain trim, flow switch, pressure gauge, and AGF Universal 3-way gauge valve, along with a 2½" hose valve. The 8511Z manifold was designed specifically for floor control applications where a downstream drain outlet, capable of full flow is required for Pressure Reducing Valve acceptance testing and future inspection and testing requirements.

The integration of the Zurn ZW5004 Valve adds another layer of functionality and versatility to the AGF solution. The ZW5004 Valve is a 2½" Pressure-Tru® Valve featuring an angle body and grooved connections. Certified as a floor control valve, an indicating valve, and a check valve in automatic sprinkler systems, it is also listed as a standpipe valve for CLASS I and CLASS III systems. With the ability to regulate pressure under both FLOW and NO-FLOW conditions, the ZW5004 Valve offers unparalleled precision and control. Field adjustments are made effortlessly thanks to its low torque design, requiring only 9 ft. lb. of torque. Despite its compact profile, the larger hand wheel ensures smooth operation, even in tight spaces.

The combined features of the Model 8511Z Sprinkler Floor Control and Zurn ZW5004 pressure reducing valve make them ideal for a wide range of applications, including retrofit projects and new installations. Their compatibility and superior performance ensure optimal flow performance, making them indispensable assets for any fire protection system.

For more information visit: www.agfmfg.com.



General Air Products' Vapor Pipe Shield Earns c-UL Listing

General Air Products is pleased to announce its patented and UL-Listed Vapor phase Corrosion Inhibitor (or VpCI®) delivery system, Vapor Pipe Shield, is now c-UL Listed and available for installation across Canada. Applying the same technology that has protected and extended the shelf life of many familiar metal products, including metallic car parts, oil pipelines, and steel bridge cables, Vapor Pipe Shield from General Air Products is a game-changing development in the prevention of damaging corrosion in dry and pre-action fire sprinkler systems.



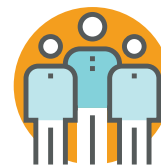
Vapor Pipe Shield went through rigorous testing in order to receive its UL Listing and c-UL Listing. Testing included evaluation in categories such as high ambient temperature stability, temperature cycling stability, toxicity, and corrosion rate, among others. Failure in any of the tests during the UL evaluation process would have prohibited Vapor Pipe Shield's listing. For a full summary of the UL evaluation, our Agency Assessment is available to view on our website.

Piped directly in-line between the air compressor and dry pipe valve, Vapor Pipe Shield is as easy to install as an Air Maintenance Device. Once installed, the VpCI® molecules are dispersed throughout the piping using the airflow provided by the dry or pre-action system and then adsorb to the metal surface of the piping system. There, these molecules form a one-molecule thick barrier – or protective shield – on the metal that repels corrosive elements from contacting the pipe directly, stopping corrosion in its tracks. And because VpCI® molecules can also penetrate any standing water in the piping network, it doesn't matter how much oxygen or moisture is in the sprinkler system – oxygen and moisture are rendered irrelevant.

Vapor Pipe Shield from General Air Products makes corrosion mitigation and prevention in any dry or pre-action sprinkler system simple, efficient, and highly cost-effective – and now that it is c-UL Listed, customers can have confidence that this technology is made with the same standards of safety, quality, and dependability General Air Products is known for.

For more information contact: General Air Products Director of Marketing Jim Doherty, jdoherthy@generalairproducts.com, www.generalairproducts.com.





Saylor P. Jacobs with BFPE International, a member of the Associated Builders and Contractors (ABC) Greater Baltimore Chapter, won Gold in the Fire Sprinkler category at the 2024 ABC Construction Management Competition (CMC) and the 35th Annual National Craft Championships (NCC). The winners were honored on the final day of ABC Convention 2024 in Orlando, Florida, on March 15, 2024. Jacobs also won first prize for Safety in the Fire Sprinkler category.

The NCC showcased the skills and expertise of nearly 190 of the nation's best craft professionals, all vying for top honors in 16 competitions with skills on display in 12 crafts.

Established in 1987, NCC celebrates and recognizes upskilling in construction, draws some of the country's most talented craft professionals, and highlights the important role that craft skills training plays in the construction industry.

The 2024 CMC featured 26 four-person teams of students from colleges and universities nationwide. CMC is ABC's hallmark competition promoting careers in construction management, featuring teams of undergraduates who test their skills in project management, estimating, safety, quality control, and presentation skills. All competition participants are active members of the ABC National Student Chapter Network, which connects local ABC Chapters to colleges and universi-

ties with construction management programs to build the talent pipeline and mentor future leaders of the construction industry.

ABC is a national construction industry trade association established in 1950 that represents more than 23,000 members. Founded on the merit shop philosophy, ABC and its 68 chapters help members develop people, win work, and deliver that work safely, ethically, and profitably for the betterment of the communities in which ABC and its members work.

For more information visit: www.abc.org.

Melisa Rodriguez, FPE, will be presenting at NFPA in Orlando on Monday, June 17, 2024. She will cover *Window Sprinklers and Water Curtains: A Deeper Look Into Sprinklers in Alternative Applications*.

Beyond the traditional use of sprinklers to protect life and property, there are other applications that sprinklers can be used for to expand what building designers and architects are allowed to do when laying out buildings. This includes allowing for windows in rated walls without the need for fire-rated glass by using special window sprinklers and enclosing large atriums with glass instead of rated enclosures. This presentation will go a little deeper into exploring the uses for sprinklers in these scenarios...

Melisa Rodriguez, Johnson Controls, is a licensed Fire Protection Professional Engineer and a NICET IV in Water-Based Systems Layout. She has over 20 years of experience working in fire protection, from designing and managing the installation of sprinkler systems with fire protection contractors to leading a team of fire protection engineers at an architectural and engineering firm. Melisa currently works as the Vertical Business Development Leader - Storage for the fire suppression product group at Johnson Controls.

She is President of the Minnesota Chapter of SFPE, is Vice-Chair for the MN Governor's Council for Fire Prevention and Control, Chairs the Minnesota Board of Licensure for architects, engineers, and other licensed professionals (AELS-LAGID), serves as Vice-Chair for NFSA's Future Leadership Committee, Chairs the Virtual Learning Subcommittee with SFPE, and is an Alternate Member of the NFPA 14 Technical Committee.

For more information visit: www.nfpa.org.

Johnathan Carl, CET, will cover *ITM of Standpipe Systems and Pressure-Reducing Devices* at NFPA on June 18. Carl is a Senior Fire Protection Application Specialist at Victaulic. He holds multiple NICET certifications and multiple NFPA certifications, and has 25+ years in fire protection as a journeyman sprinkler fitter, Project Manager, and lead Service/Inspector. He currently serves on NFPA 14, 24, and 420 as a Principal Committee Member, and is a former NFPA 13 Alternate Member. He serves the NFSA/NFPA 25 Task Force Committee. He has delivered multiple fire protection seminars and training throughout the U.S.A., South America, and Canada.





RELIABLE AUTOMATIC SPRINKLER was recently recognized as one of four finalists in the South Carolina Manufacturers Alliance 2024 competition, “The Coolest Thing Made in SC”.

Advancing from a field of 166 nominated products, Fire Sprinklers advanced through four rounds during the month of March. Over 218,000 votes were cast during the competition. Each of the four finalists were invited to the State Capitol where they were presented their award by South Carolina Governor Henry McMaster.

The South Carolina State Senate has also passed a resolution, which was sponsored by Senators Rice and Alexander, recognizing Reliable as “...a manufacturing company that brings great pride to the State of South Carolina.”

“This was a win for our industry by bringing awareness of fire sprinklers to the people of South Carolina,” noted Reliable VP of Human Resources Ashley Teal. “Our employees and industry partners all got behind the competition and had a lot of fun with it. And as an employer in a competitive labor market, the visibility shines a nice spotlight on fire sprinklers as a ‘cool’ industry!”

To learn more about the “Coolest Thing Made in SC” competition visit: <https://scmanufacturingmadness.com>.

To read the full Senate Resolution, visit: https://www.scstatehouse.gov/sess125_2023-2024/bills/1207.htm.



John Corcoran (Reliable), Jennifer Kouyoumjian (Reliable), SC Governor Henry McMaster; Kevin Fee Jr. (Reliable), SC Senate President Thomas Alexander; Ashley Teal (Reliable), Nathan DeShong (Reliable)



South Carolina Governor Henry McMaster with Reliable Senior Vice President of Corporate Sales Kevin T. Fee, Jr.



About Reliable:

Reliable Automatic Sprinkler Co., Inc. is a USA-based manufacturer and distributor of fire protection equipment. For over 100 years, Reliable has manufactured high quality, innovative fire sprinklers, valves, and special systems. Reliable also distributes a full line of best-in-class system components. All Reliable products are backed with premier customer service and technical support. Reliable’s corporate headquarters is in Elmsford, NY with manufacturing headquarters in Liberty, SC. Regional sales and distribution centers are located throughout North America and around the world.

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Benefit Tournaments

Tony Bice Memorial Golf Tourn. **May 6, 2024 – Hoover, AL**

The Alabama Fire Sprinkler Association will hold the Tony Bice Memorial Golf Tournament (a 501c3 entity) on May 6, 2024, at the Hoover Country Club, 3140 Club Drive, Hoover, Alabama.

Proceeds from this tournament benefit the Children's of Alabama & Camp Conquest, the UAB Hospital Burn Center, and the University of South Alabama Health University Hospital Regional Burn Center.

To register go to: <https://birdease.com/tonybice>. Make sure to explore the sponsorship options and register a friend to bring to dinner.

For more information contact: Alabama Fire Sprinkler Association, P O Box 1403, Wetumpka, AL 36092; (334) 546-3815, afsaexdir@aol.com, www.alfiresprinkler.org.

NFSA CT Chapter Golf Tourn. **May 20, 2024 – Glastonbury, CT**

The National Fire Sprinkler Association's Connecticut Chapter will hold their Golf Outing on May 20, 2024, at the Glastonbury Hills Country Club in Glastonbury, Connecticut, and will benefit the Connecticut Cares Burn Foundation.

This event includes a cookout lunch, complimentary practice range, 18 holes of golf with carts, cocktail hour and bar service after golf, dinner, raffle, and various awards.

There will be two longest drive contests (M/F), a closest to the pin challenge, a gift raffle, and prizes for the 1st and 2nd place teams.

There will be an awards presentation with cocktails and dinner directly after golf in the clubhouse.

For more information contact: Paul Zbikowski, State Coordinator-New England & New York, zbikowski@nfsa.org.

IL Burn Prevention Golf Inv. **June 4, 2024 – Romeoville, IL**

The 28th Annual Illinois Burn Prevention Golf Invitational will be held Tuesday, June 4, 2024, at the Mistwood Golf Club, Romeoville, Illinois.

This event benefits the Illinois Fire Safety Alliance and its Camp "I Am Me" for burn-injured children; From Tragedy to Triumph Foundation, which awards scholarships to college students who are burn survivors; OSF St. Anthony Medical Center Burn Unit in Rockford; and Cook County Burn Unit at Stroger Hospital in Chicago.

Thanks to the generous support of dedicated sponsors, this very special event has raised approximately \$1.94 million for burn injury care, awareness, support, and other programs.

For more details visit: www.ilburnpreventionassoc.com.

Or, contact: Ryan Baumgartner, Illinois Burn Prevention Association, (224) 422-0646, ibpagolf@gmail.com.

27th Dean Cornwell Golf Classic **June 4, 2024 – Goodlettsville, TN**

The Tennessee Fire Sprinkler Contractors Association is holding the 2024 Dean Cornwell Golf Classic on Tuesday, June 4, 2024, at the Twelve Stones Golf Course in Goodlettsville, Tennessee.

Twelve Stones Golf Club offers 18 championship holes spanning over 6,000 yards, with the meandering Manning Creek as its centerpiece. The beautifully manicured bent greens and challenging course layout makes Twelve Stones one of the most enjoyable golf courses in Middle Tennessee.

A portion of the proceeds from the Dean Cornwell Golf Classic will be used to help with local issues such as families that are displaced by fires, projects that will help promote the fire sprinkler industry, efforts to deal with issues that affect the fire sprinkler industry, and providing meals for distressed families during the holidays.

All players are welcome. Entry deadline is May 29, 2024.

For more information contact: Brian Biggs, (615) 642-9717, biggs@nfsa.org, www.tfscsca.com.

13th Annual Texas Skins & Fins **June 6-9, 2024 – League City, TX**

The Fire Sprinkler Contractors Association of Texas is holding the 13th Annual Skins and Fins event on June 6-9, 2024, at the South Shore Harbour Resort, 2500 S. Shore Blvd., League City, Texas. This is an outdoor adventure for the whole family, with fishing, golfing, a vendor show, and cruise. The movie theme is Wild Wild West!

This event will benefit association programs.

For more information contact: Sarah Kiefer, FSCATX, (512) 844-6632, info@fscatx.org, www.fscatx.org.

GBA Annual Charity Golf **June 10, 2024 – Pleasanton, CA**

The American Fire Sprinkler Association's Greater Bay Area Chapter is holding their Annual Charity Golf Event on June 10, 2024, from 8:00 a.m. to 4:00 p.m., at The Club for Ruby Hill, 3400 W. Ruby Hill Dr., Pleasanton, California.

The cost for registration is \$800 for a foursome and \$200 for a single player. Sponsorship opportunities are available.

The event is benefitting The Firefighters Burn Institute.

For more information visit: www.afsa-gba.org.

NJ Chapter 46th Golf Outing **June 13, 2024 – Ringoes, NJ**

The New Jersey Chapter of the NFSA is holding the 46th Annual Golf Outing on Thursday, June 13, 2024, from 11:30 a.m. to 6:00 p.m. at Heron Glen Golf Course in Ringoes, New Jersey. This course is a beautiful and timeless historic landmark.

Registration begins at 11:30 a.m., with tee-off at 1:00 p.m.
The cost for this event is only \$225, if registered before May 13, 2024. This price includes entry into all events, 18 holes of golf, cart, lunch, dinner, and five drink tickets.

Events include putting challenge on the practice green, two-longest drive contest, closest to the pin challenge, 50/50 event, and a gift raffle.

Early bird pricing is available for all who are registered on or before May 13, 2024.

Please pre-register as soon as possible.

For more information contact: David Davis, NJ State Coordinator, davis@nfsa.org.

17TH Burn Aid Golf Classic

June 27, 2024 – Elkhorn, NE

The Fire Sprinkler Contractors Association of Nebraska is holding the 17TH Annual Burn Aid Golf Classic on Thursday, June 27, 2024, at 10:00 a.m. at the Indian Creek Golf Club, 3825 N 202ND St., Elkhorn, Nebraska.

This event will benefit the Tangier Shriners Transportation Fund. The Tangier Shriners transport patients receiving pediatric orthopedic, spinal cord, cranial facial, and burn care in their hospital system to and from whichever hospital they are receiving treatment. The cost of this service is funded through the Tangier Shriners Transportation Fund. The Burn Aid Golf Tournament will directly support the current 350 local children receiving care at Shriners Hospitals for Children in Cincinnati, St. Louis, Minneapolis and Chicago. Today, the Shriners are providing transportation for patients 4 to 5 days a week. Be it by van or through the air, dedicated volunteers keep this service running.

Since 1989, FSCAN has sought to bring together people associated with the fire protection industry in order to stay up to date on changes in codes and regulations. FSCAN also focuses on providing educational opportunities to promote fire sprinkler installations as a means of saving lives and property.

Over the past 17 years, with your support, FSCAN's partnership with the Tangier Shriners has been able to collectively raise over \$93,000 for the Tangier Transportation Fund.

For more information contact: Melissa Kimball: (402) 553-1221, Chris Meininger: (402) 304-6984, Sean Saunders: (303) 416-0449. Or contact: Fire Sprinkler Contractors Association of Nebraska (FSCAN), P O Box 874, Norfolk, NE 68702-0874, (402) 304-6984, www.fscan.org.

CFPA Annual Golf Tournament

July 26, 2024 – Littleton, CO

The Colorado Fire Protection Association Annual Golf Tournament will be held July 26, 2024, at the Arrowhead Golf Club, Littleton, Colorado, and benefits the Children's Hospital and Colorado Burn Camps Program.

The event starts with registration at 6:15 a.m. The practice range opens at 7:00 a.m., and there will be a 7:45 a.m. shotgun start, and a 1:00 p.m. lunch & awards presentation.

For more information contact: Bryan Echelberger, (720) 935-5846, bryan@veritasfire.com, www.cofireprotection.org.

Virginia Burn Survivors Golf

October 9, 2024 – Williamsburg, VA

The 31ST Annual AFSA-Virginia Burn Survivors Golf Tournament will be held October 9, 2024, at the Williamsburg National Golf Club, on the Jamestown & Yorktown Courses, 3700 Centerville Rd., Williamsburg, Virginia.

This event will benefit the Central Virginia Burn Camp 501(c)3 and the Old Dominion Firefighters Burn Foundation 501(c)3.

The dinner and awards will be at 5:00 p.m. on the grounds to celebrate the winners.

Registration begins at 9:30 a.m., with lunch at 10:30 a.m. and a shotgun start at 12:00 noon. The practice range will be open from 11:00 a.m. until noon.

Deadline for entry is September 6, 2024.

If you know of something that can be donated, such as sports tickets, autographed sports memorabilia, or gift cards to various merchants or retailers, please let any committee member know. Or if you have any idea or concept that will improve the tournament as a whole, please let us know!

For more information contact: Bob Beckwith, bbeckwith@cavalierfire.com, or Hooper Loscomb, timothy.loscomb@eaglefire.com.

Please send your Golf Calendar items, Announcements, Reports, Check Presentations, and photos to: info@fpcmag.com.



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Benefits & Events Calendar

See regular CALENDAR on page 36

May 6, 2024

TONY BICE MEMORIAL

Benefitting Children's of Alabama /Camp Conquest, and UAB and University of South Alabama Health University Hospital Regional Burn Center

Hoover Country Club, Hoover, AL
Alabama Fire Sprinkler Association
(334) 546-3815, afsaexdir@aol.com
www.alfiresprinkler.org

May 8, 2024

COMMON VOICES 7TH GOLF CLASSIC

Benefitting Common Voices

Wailea Emerald, Maui, HI

Jenna Pritchett

National Fire Sprinkler Association

jenna@fireadvocates.org

www.fireadvocates.org

www.NFSA.org, 800-683-NFSA (6372)

May 20, 2024

NFSA/CT CHAPTER GOLF OUTING

Benefitting Connecticut Cares

Burn Foundation

Glastonbury Hills CC, Glastonbury, CT

Paul Zbikowski, State Coordinator

New England & New York

zbikowski@nfsa.org

June 4, 2024

27TH DEAN CORNWELL GOLF CLASSIC

Benefitting Association Programs

Twelve Stones G.C., Goodlettsville, TN

Tennessee Fire Spk. Contractors Assoc.

Brian Biggs, (615) 642-9717

biggs@nfsa.org, www.tfscs.com

June 4, 2024

ILLINOIS BURN PREVENTION

GOLF INVITATIONAL

Mistwood Golf Club, Romeoville, IL

Benefitting Camps, Scholarships, and Burn Units

www.ilburnpreventionassoc.com

(224) 415-2774, IBPAGolf@gmail.com

June 6-9, 2024

13TH ANNUAL TEXAS SKINS AND FINS

Benefitting Association Programs

South Shore Harbour Resort

League City, TX

FSCATX, (512) 844-6632

info@fscatx.org, www.fscatx.org

June 10, 2024

GBA ANNUAL CHARITY GOLF

Benefitting Firefighters Burn Institute

The Club for Ruby Hill

Pleasanton, CA

AFSA Greater Bay Area Chapter

GreaterBayAreaChapter@gmail.com

AFSA-GBA.org

June 13, 2024

46TH NFSA NJ CHAPTER GOLF OUTING

Benefitting Firefighters Mutual

Benevolent Assn. Foundation

& Phoenix Society

Heron Glen G.C., Ringoes Twp, NJ

Dave Davis, (609) 300-7169

davis@nfsa.org

June 27, 2024

17TH ANNUAL BURN AID GOLF CLASSIC

Benefitting Tangier Shriners

Transportation Fund

Indian Creek Golf Club, Elkhorn, NE

Fire Sprinkler Contractors Association

of Nebraska (FSCAN)

Melissa Kimball, (402) 553-1221

melissa@mahoneyfiresprinkler.com

www.fscan.org

July 26, 2024

CFPA ANNUAL GOLF TOURNAMENT

Benefitting Children's Hospital

Colorado Burn Camps Program

Arrowhead Golf Club, Littleton, CO

Bryan Echelberger, (720) 935-5846

bryan@veritasfire.com

www.cofireprotection.org

August 14, 2024

NFSA MICHIGAN GOLF OUTING 2024

Shepherd's Hollow Golf Club

Clarkston, MI, www.nfsa.org

Ron Ritchey, NFSA

(765) 412-6707, ritchey@nfsa.org

www.birdease.com/nfsamichigangolf

August 19, 2024

AFSA SAN DIEGO BENEFIT GOLF

Benefitting Warrior Foundation

Freedom Station

The Heights Golf Club, San Diego, CA

Rhonda Gudger, Executive Director

AFSA San Diego Chapt., (951) 326-4600,

rhondasandiegoafsa@gmail.com

August 20, 2024

36TH BURN CENTER

GOLF INVITATIONAL

Benefitting St. Mary's Regional

Burn Center, Professional

Firefighters of WI Charitable

Foundation Summer Camp

Grand Geneva Resort, Lake Geneva, WI

Jim Gawloski, gawloksij@gmail.com

www.giveawf.org/bcgi

August 22, 2024

NFSA INDIANA CHAP. GOLF OUTING

Benefitting Hoosier Burn Camp

Country Club of Indianapolis

Ron Ritchey, (765) 412-6707

ritchey@nfsa.org

www.birdease.com/22940

September 9, 2024

26TH ANNUAL NFSA MINNESOTA

CHAPTER BURNAID GOLF CLASSIC

Benefitting Burn Aid Foundation

Regions Hospital Burn Center

Dellwood Country Club

Dellwood, MN

Matt Gallagher, (651) 755-3906

info@burnaidfoundation.org

September 12, 2024

ANNUAL GOLF OUTING

AFSA Chesapeake Chapter

The Links at Challedon, Mt. Airy, MD

Danielle Fowler, (410) 972-1122

daniellef@pottersignal.com

www.afsachesapeakechapter.org

September 23, 2024

35TH ANNUAL BURN OUTING

Benefitting The Ohio State Burn Center

at OSU, and The Burn Center at NCH

The Medallion Club, Westerville, OH

Bob Dawson, bdd4@yahoo.com

www.sfpecoc.com

September 25, 2024

**CASA ONTARIO REGIONAL
GOLF TOURNAMENT**

***Benefitting Camp BUCKO
& SickKids Foundation***

Redcrest G.C., King City, Ontario
Daniel Beck, (905) 477-2270
dbeck@casa-firesprinkler.org
www.casa-firesprinkler.org

September TBD, 2024

**11TH ANNUAL AFSA NJ CHAPTER
BOB YOUNG BENEFIT GOLF OUTING
*Benefitting B. Young Scholarship
Fund and the Phoenix Society***

Galloping Hills Golf Club
Kenilworth, NJ
Al Zanga, (973) 679-1012
Gary Lederman, (914) 564-3916

October 7, 2024

**KFSCAF ANNUAL GOLF OUTING
Frankfort Country Club, Frankfort, KY
Michelle Jacobi, KY Fire Sprinkler
Contractors Association Foundation
michelle@ksae.com, (502) 223-5322
www.kfscac.org**

October 9, 2024

**31ST ANNUAL AFSA-VIRGINIA
BURN SURVIVORS GOLF TOURNAMENT
*Benefitting the Central Virginia Burn
Camp and the Old Dominion
Firefighters Burn Foundation*
Williamsburg National Golf Club
Williamsburg, VA
Bob Beckwith
bbeckwith@cavalierfire.com
Hooper Loscomb
timothy.loscomb@eaglefire.com**

October 9, 2024

**FIRE SPRINKLER CONTRACTORS
ASSOCIATION CHARITY GOLF
Benefitting Burn Centers
Coyote Hills Golf Club
Fullerton, CA
Larry Seligman, (626) 673-5345**

October 11, 2024

**GBA BOWLING TOURNAMENT
Benefitting Association Programs
Dublin, CA
AFSA - Greater Bay Area Chapter
www.afsa-gba.org**

October 14, 2024

**34TH SCOTTISH RITE
CHARITY GOLF CLASSIC
*Benefitting Scottish Rite
Hospital for Children*
Trophy Club Country Club
Trophy Club, TX
Sarah Kiefer, (512) 844-6632
sarah@fscatx.org, www.fscatx.org**

October 25, 2024

**24TH BOB MCCULLOUGH MEMORIAL
GOLF TOURNAMENT
*Benefitting Fire Safety
Educational Projects*
Chateau Elan, Braselton, GA
Mindy McCullough Buckley
mindy@allsouthsprinkler.com
www.georgiafiresprinkler.org**

October 28, 2024

**16TH LFSA GOLF TOURNAMENT
Beneficiary To Be Determined
Santa Maria G.C., Baton Rouge, LA
Ellen Ballard, (318) 841-1494
Louisiana Fire Sprinkler Association
eballard@firetechsystems.com
www.lafiresprinkler.org**

October TBD, 2024

**26TH KEN HOUSTON MEMORIAL
*Benefitting Wake Forest
Baptist Health's Burn Center*
Colonial C.C., Thomasville, NC
AFSA Carolinas Chapter
John Turnage, (919) 624-3456
jturnage@umpiretechnologiesgroup.com**

October TBD, 2024

**MID ATLANTIC AFSA CASINO NIGHT
Benefitting Burn Foundation
Sheraton Valley Forge
King of Prussia, PA
afsamidatlanti@gmail.com**

NOVEMBER 15, 2024

**NORCAL-NV SFPE GOLF EVENT
Benefitting Scholarships
Tilden Park G.C., Berkeley, CA
Patrick Kogoma, (925) 997-3247
patrick.kogoma@ffic.com
www.ncnsfpe.org**

November TBD, 2024

**GARY WENNES MEMORIAL
GOLF TOURNAMENT
Benefitting Arizona Burn Foundation
The 500 Club, Phoenix, AZ
Matthew Virtue, Cell (602) 376-4818
matthew.virtue@Viciaulic.com**

December 10, 2024

**GFSA CHRISTMAS GATHERING
Benefitting Toys for Tots
Hamilton Mill, GA
mindy@allsouthsprinkler.com
www.georgiafiresprinkler.org**



Benefits & Events by State:

Alabama: May 6

Arizona: November TBD

California:

Pleasanton – June 19

San Diego – August 19

Fullerton – October 9

Dublin – October 11

Berkeley – November 15

Colorado: July 26

Connecticut: May 20

Florida:

March 27 (past event)

April 14 (past event)

May 2024

Georgia:

Braselton – October 25

Hamilton Mill – December 10

Hawaii: May 8

Indiana: August 22

Illinois: June 4

Kentucky: October 7

Louisiana: October 28

Maryland: September 12

Michigan: August 14

Minnesota: September 9

Nebraska: June 27

New Jersey:

Ringoes Twp – June 13

Kenilworth – September TBD

North Carolina: October TBD

Ohio: September 23

Pennsylvania: October TBD

Tennessee: June 4

Texas:

League City – June 6-9

Trophy Club – October 14

Virginia: October 9

Wisconsin: August 20

Canada: Ontario – September 25

Calendar

May 7-10, 2024

**NFSA ANNUAL SEMINAR AND
BUSINESS & LEADERSHIP CONF.**
Wailea Beach Resort, Wailea, Maui, HI
NFSA, www.nfsa.org

May 12-18, 2024

HOME FIRE SPRINKLER WEEK
www.homefiresprinkler.org

May 13-24, 2024

**PERFORMING MANUAL
HYDRAULIC CALCULATIONS**
Live Online with Cecil Bilbo
www.sprinkleracademy.com

May 13-31, 2024

**CLASS BUNDLE: 2024 Q2 BASIC
MANUAL CALCULATIONS AND
SIMPLE LOOPS AND GRIDS**
Live Online with Cecil Bilbo
www.sprinkleracademy.com

May 14-16, 2024

**INSPECTION AND TESTING FOR THE
FIRE SPRINKLER INDUSTRY (3-DAY)**
Wayne Automatic Fire Sprinklers
Fort Myers, FL, www.nfsa.org

May 16, 2024

**ROCKY MT. FIRE PROT. EXPO WITH
CONT. ED. SIDE-BY-SIDE BURN DEMO**
DoubleTree by Hilton, Thornton, CO
Colorado Fire Protection Association
cfpa@cofireprotection.org

May 17, 2024*

**2024 TRADE PRO TOUR
FERGUSON FIRE & FABRICATION**
North Highlands, CA
www.ferguson.com/content/pro-services/branch-services/counters/trade-pro-tour/

May 28-31, 2024

MANUAL CALCS OF LOOPS AND GRIDS
Live Online with Cecil Bilbo
www.sprinkleracademy.com

June 2-4, 2024

CASA ANNUAL CONFERENCE
Delta St. John's, Newfoundland
www.casa-firesprinkler.org

June 6, 2024

**2024 TRADE PRO TOUR
FERGUSON FIRE & FABRICATION**
St. Louis, MO
www.ferguson.com/content/pro-services/branch-services/counters/trade-pro-tour/

June 11, 2024

**CAPITAL REGION FIRE SPRINKLER
ASSOC. (CRFSA) CHAPTER MEETING**
Univ. of Maryland Fire Rescue Institute
(MFRI) Fire Sprinkler Valve Lab
College Park, MD
www.nfsa.org

June 17-21, 2024

NFPA CONFERENCE & EXPO
Orange County Convention Center
Orlando, FL, www.nfpa.org

June 27, 2024

**2024 TRADE PRO TOUR
FERGUSON FIRE & FABRICATION**
Commerce City, CO
www.ferguson.com/content/pro-services/branch-services/counters/trade-pro-tour/

July 15-26, 2024

**PERFORMING MANUAL
HYDRAULIC CALCULATIONS**
Live Online with Cecil Bilbo
www.sprinkleracademy.com

July 15-Aug 2, 2024

**CLASS BUNDLE: BASIC MANUAL CALCS
AND SIMPLE LOOPS AND GRIDS**
Live Online with Cecil Bilbo
www.sprinkleracademy.com

July 15-Oct 4, 2024

10-WEEK DESIGN COURSE
Live Online with Cecil Bilbo
www.sprinkleracademy.com

August 5-9, 2024

**FIRE PROT. CONTRACTOR
MASTER CLASS**
NFSA Headquarters
Linthicum Heights, MD, www.nfsa.org

August 14-17, 2024

FIRE-RESCUE INTERNATIONAL - 2024
IAFC's Annual Conference and Expo
Dallas, TX, www.iafc.org

September 18-21, 2024*

**AFSA43 ANNUAL
CONVENTION, EXHIBITION, AND
APPRENTICE COMPETITION**
Gaylord Rockies, Denver, CO
American Fire Sprinkler Association
www.firesprinkler.org



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September 18-19, 2024

23RD INT'L WATER MIST CONFERENCE
Radisson Blu Astrid Hotel
Antwerp, Belgium
www.iwma.net

October 6-8, 2024

2024 SFPE ANNUAL CONFERENCE
Louisville, KY
www.sfpe.org

October 6-12, 2024

FIRE PREVENTION WEEK
Plan to Promote Fire Sprinklers!

**FPC plans to attend*

Other Dates by Organization

American Fire Sprinkler Association

www.firesprinkler.org

Check for current Dates and Courses online.

May 6-7: Beginning ITM Workshop

May 6-7: Advanced Hydraulics Workshop

May 8-9: Beginning ITM Workshop

May 10: Intro to the Fire Sprinkler Ind.

Jul. 8-9: Advanced Hydraulics Workshop

Jul. 8-9: Beginning ITM Workshop

Jul. 10-12: Intermediate ITM Workshop

Jul. 10-12: Sprinkler Hydraulics Workshop

Jul. 15-26: Beginning Design School

Jul. 22-Aug. 2: Intermediate Design School

Jul. 25: Intro to the Fire Sprinkler Ind.

Aug. 21-23: Intermediate ITM Workshop

Sep. 4: Intro to the Fire Sprinkler Ind.

Oct. 2-4: Sprinkler Hydraulics Workshop

Oct. 14-25: Intermediate Design School

Nov. 4-22: Beginning Design School

Nov. 6-7: Advanced Hydraulics Workshop

Nov. 6-7: Beginning ITM Workshop

Nov. 13-15: Intermediate ITM Workshop

& much more...

Ferguson Fire & Fabrication

2024 Trade Pro Tour

www.ferguson.com

Sep. 12: Houston, TX

Oct. 3: West Chester, OH

Oct. 18: Las Vegas, NV

Oct. 25: Phoenix, AZ

Nov. 7: West Palm Beach, FL

Nov. 14: Springfield, VA

Fire Tech Productions

www.firetech.com

May 7-8: I&T of Fire Pumps, Indianapolis, IN

May 14-15: I&T FSS, Grand Rapids, MI

May 21-23: F Alarm & Det. Systems, Carmel, IN

Jun. 18-20: Fire Pump Maint.-Master, Atlanta, GA

Jul. 15-16: I&T FSS, Indianapolis, IN

Jul. 17-18: I&T of Fire Pumps, Indianapolis, IN

Jul. 30-Aug 1: F Alarm & Det. Systems, IN

Aug. 13-15: Fire Pump Maint., Indianapolis, IN

Sep. 10-11: Fire Spk. Service & Repair, IN

Sep. 17-18: Inspect. & Test. of F. Pumps, IN

Sep. 24-26: Fire Pump Maint.-Master, Atlanta, GA

Oct. 1-2: I&T FSS, San Antonio, TX

Oct. 15-17: F Alarm & Det. Systems, IN

Nov. 12-14: Fire Pump Maintenance, Atlanta, GA

Dec. 3-4: I&T FSS, Atlanta, GA

Dec. 5-6: Inspect./Test of Fire Pumps, Atlanta, GA

May 2024

National Fire Protection Association:

www.nfpa.org

Check online for Dates and Courses including
*Online Training Series: NFPA 13, NFPA 13
Storage; NFPA 25; NFPA 20: Installation of
Stationary Pumps for Fire Protection (2016);
NFPA 13, Standard for the Installation of
Sprinkler Systems (2019).*

& much more

National Fire Sprinkler Association:

www.nfsa.org

May 1: NFSA MN Meeting, Mounds View, MN

May 3: Side-by-Side Demo, Itasca, IL FPD

May 7-8: Fire Spk. Sys. Plan Review, Edina, MN

May 13: PenJerDel Meeting, King of Prussia, PA

May 14-16: Insp. & Test. for the Fire Spk. Ind.

Wayne Automatic Fire Sprinklers, Fort Myers, FL

May 14: Intro. to Fire Spk. Hydraulic

Calculations for the AHJ "Lunch & Learn"

Behler-Young Company, Grand Rapids, MI

May 14: NFSA NJ Chapter Meeting, Lodi, NJ

May 15: Spk. & Fire Alarm Acceptance Testing,
San Diego, CA

May 15: Intro to Fire Sprinkler Hydraulic

Calculations for the AHJ "Lunch & Learn"

Brighton Area Fire Department, Brighton, MI

May 16: NFSA Illinois Chapter Meeting

Maggiano's Little Italy, Oak Brook, IL

May 21-23: Layout Tech: Application, Dallas, TX

& much more...

Oklahoma Fire Sprinkler Association:

www.ofsa.info

May 8, Jun. 5, Jul. 10, Aug. 7, Sep. 11, Oct. 2,

Nov. 6, & Dec. 4: OK Alarm, Locksmith, and

Fire Sprinkler Committee Meetings



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Hydrant Flow Test for Windows

By Dr. Sang H. Wong

Hydrant flow testing provides important information used for classifying active fire hydrants and the hydraulic calculation of fire sprinkler systems. The collection, processing, and dissemination of hydrant flow test data have been mostly a labor-intensive engineering chore recorded by pencil on handwritten pieces of paper. The data has been mostly stored and displayed on paper forms. Our Hydrant Flow Test software is designed to transform this tedious task into one that is efficient and useful.

Hydrant Flow Test 6.2 for Windows performs single or multiple hydrant flow tests per NFPA-291 using three modules. The Summary module (see the left side of *Figure 1* on facing page) has 10 fields for hydrant parameters, e.g., diameter, coefficient, and pitot pressure. Static and residual pressure along with hydrant flow is plotted on the Graph module. Clicking the Graph module toggles between the Summary and Data Entry modules. There is no limit on the total number of individual flow tests. The Graph module automatically responds to changes in flow test parameters. Flows may be extrapolated at 0 psi, 20 psi or other user defined pressure points.

The precise mapping of fire hydrants is important to firefighting crews at the scene of a raging blaze. The Geocoder utility is

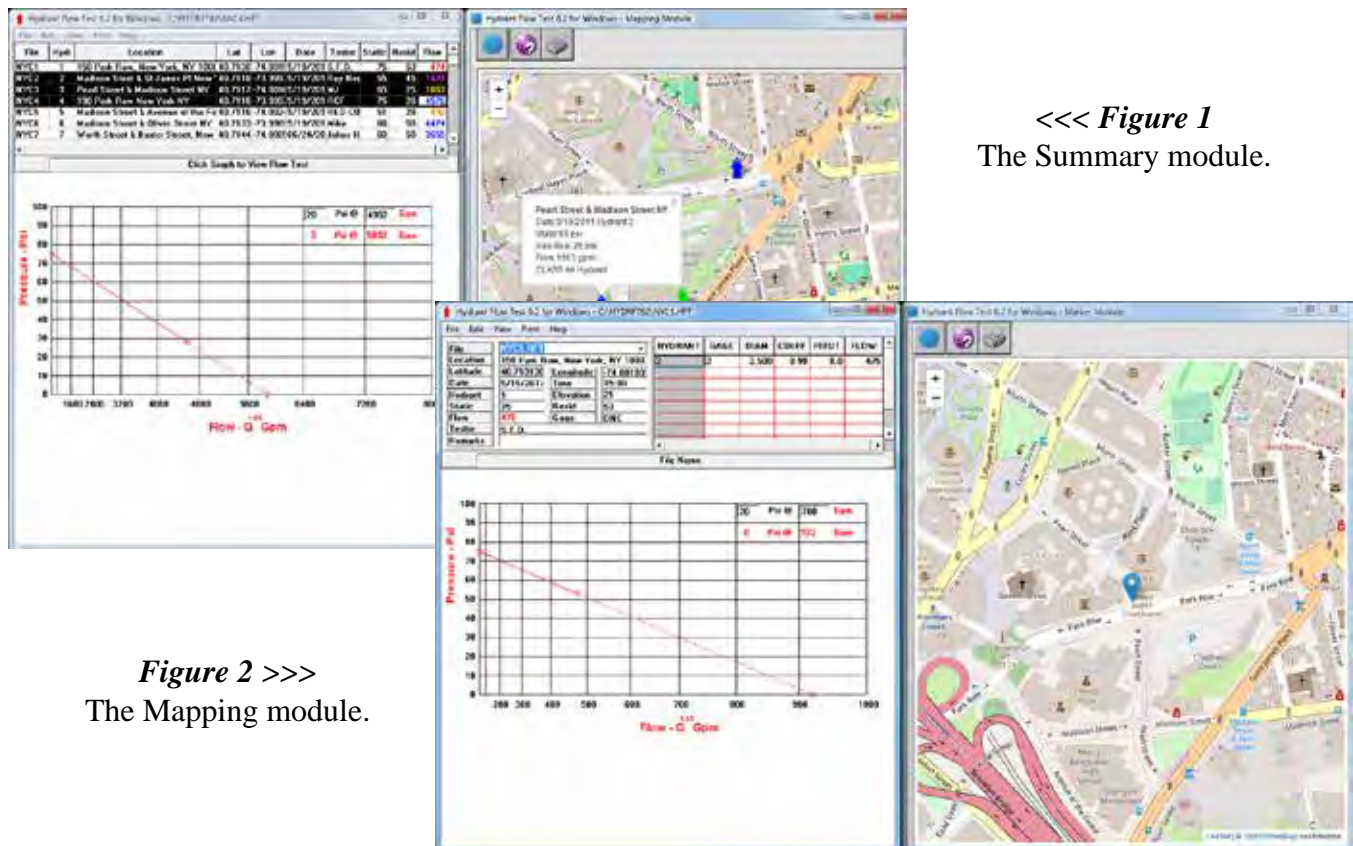
that part of the Mapping module that translates street addresses into GPS coordinates for mapping the hydrants as shown on the Mapping module (see the right side of *Figure 2* on facing page). The Geocoder cross-hair may be dragged and dropped anywhere on the map to determine street corner GPS coordinates. The Mapping module plots color coded Class AA, A, B, and C hydrant markers by street address or GPS coordinates.

About Hydronics Engineering: Hydronics Engineering has more than 34 years of experience developing software for testing fire hydrants and the hydraulic calculation of fire sprinkler and fire standpipes.

About the Author:

Dr. Sang H. Wong is CEO of Hydronics Engineering. He is a graduate of the University of California, Los Angeles where he studied computer science and water resources engineering. Sang also worked as a fire sprinkler designer for several companies in the San Francisco Bay area including Grinnell Fire Protection in Dublin, California.

For more information contact: Hydronics Engineering, 800-845-9819, Fax 510-474-1438, sales@hydronicseng.com, www.hydronicseng.com.



<<< *Figure 1*
The Summary module.

Figure 2 >>>
The Mapping module.

New: Armstrong's Fire Manager

Enhances Performance of Intelligent Fire Pumps

Armstrong Fluid Technology has announced the launch of Fire Manager, a cloud-based service that enables Active Performance Management in its industry-leading Design Envelope Fire Pumps.

The innovative new service proactively tracks and manages pump performance and provides early diagnostic warnings and timely automated reports that help customers make informed decisions and take immediate action to deliver the most efficient and safest fire safety system performance.

More specifically, Fire Manager: records data points on municipal supply pressure; makes digital recordings of pump operation and related data; provides pump analytics and insights to support condition-based maintenance; provides timely notifications and alerts for any impending issues in pump performance; provides increased reliability and safety supported by real-time and historic test and performance data.

"When combined with Armstrong's self-regulating, variable speed fire pumps, Fire Manager helps deliver several unique points of value to fire-safety professionals," said Steven Baird, Marketing Manager, Fire Products, Building Systems Solutions.

This includes: cost savings from reduced need for PRVs (up to \$1,500 per sprinkler (branch); no drain requirements for any of the PRVs not required; space savings in the mechanical room; simpler, faster installation; elimination of safety factors for supply pressure variation; ability to predict and report potential equipment failure that could result in expensive damage and/or loss of life; reduction of the number of zones in a sprinkler system and the potential elimination of storage tanks; help with fire systems having large differentials between static and residual pressures; and increased design flexibility.

In addition to providing important new safety benefits, Armstrong's Design Envelope Fire Pumps hold the distinction of being the first self-regulating variable-speed fire pump to meet NFPA-20 (2019 Edition), Section 4.8 standards.

"Through Active Performance Management and Armstrong 360 Service and Support solutions, customers will get the best possible performance and value from fire safety systems at every phase in the lifecycle of a building" Baird concludes.

For more information visit: www.armstrongfluidtechnology.com.

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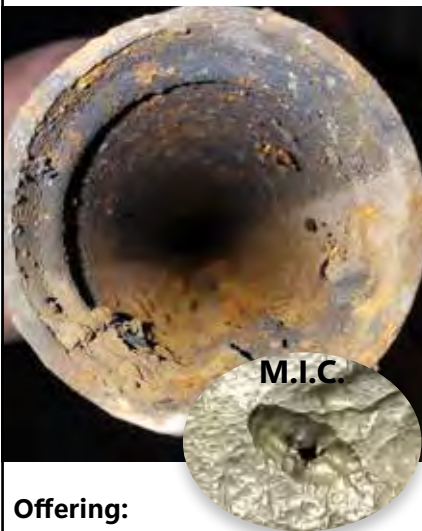
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Seminars & Events

Performing Manual Hydraulic Calculations

May 13-24, 2024 — Live Online

The Academy of Fire Sprinkler Technology is offering “Performing Manual Hydraulic Calculations” on May 13-24, 2024, live online with instructor Cecil Bilbo.

You may join them for two hours a day (9:00-11:00 a.m. Central Time) for 10 days as they spend a few hours learning to perform manual calculations. These lessons will help anyone to fully understand calculations and the data involved. These lessons will prepare participants for the calculation portion of the NICET Exam.

The curriculum covers: Day 1: Review of Basics; Day 2: Flow and Friction; Day 3: Paths and Calculating Branch-lines; Day 4: Most Remote Areas; Day 5: Equivalent K-Factors; Day 6: The First Full Calc; Day 7: Calculating a Dry System; Day 8: When the Most Remote Sprinkler Isn't; Day 9: Calculating Start to Finish; Day 10: Review of Entire Curriculum.

For more information contact: The Academy of Fire Sprinkler Technology, 101 South Main Street, Suite 001, Decatur, IL 62523; (217) 607-0325, www.sprinkleracademy.com

Class Bundle: 2024 Q2

Basic Manual Calculations and Simple Loops and Grids

May 13-31, 2024 – Live Online

The Academy of Fire Sprinkler Technology is offering a “Class Bundle: 2024 Q2 Basic Manual Calculations and Simple Loops and Grids” on May 13-31, 2024, live online with Instructor Cecil Bilbo.

This package includes “Performing Basic Hydraulic Calculations.” This course is two hours a day (9:00-11:00 a.m. CT) for 10 days as they spend a few hours learning to perform manual calculations. These lessons will help anyone to fully understand calculations and the data involved. These lessons will prepare participants for the calculation portion of the NICET Exam.

“Calculating Water Flow in Single Loops and Grids.” This course is two hours a day (9:00-11:00 a.m. CT) for five days and spends a few hours learning how to calculate water flow in simple loops using the Hazen-Williams, Hardy Cross, and the Fleming Methods of hydraulic calculation. (You should be familiar with the Hazen Williams Method of Calculations.) They will also explore calculating a grid by hand!

For more information visit: www.sprinkleracademy.com

Manual Calcula- tions of Simple Loops and Grids

May 28-31, 2024 — Live Online

The Academy of Fire Sprinkler Technology is offering “Manual Calculations of Simple Loops and Grids” on May 28-31, 2024, live online with Instructor Cecil Bilbo.

This course is two hours a day (9:00-11:00 a.m. CT) for five days as they spend a few hours learning how to calculate water flow in simple loops using the Hazen-Williams, Hardy Cross, and the Fleming Methods of hydraulic calculation. (You should be familiar with the Hazen Williams Method of Calculations.)

They will also explore calculating a grid by hand!

Check the website for other offerings.

For more information visit: www.sprinkleracademy.com.



**Send your Seminars
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DESIGN SERVICES

Fire Protection Engineer TN GA NC — Need a fire protection engineer to assist with permitting/design? Contact: L. Wayne King, FPE, Design Development, LLC; (931) 273-8644, wking@designdvpt.com.

Need Drawings? — Submittal drawings, working drawings, surveys, calculations, cut sheets, and material lists. We can do it all! NICET Certified. Great prices. Excellent work. Nationwide services. Millennium Fire Protection Design, (616) 844-1401, www.MFPCAD.com.

CADfps, LLC — Providing fire sprinkler system CAD drafting services nationwide! NICET-certified and FPE-degreed professionals in the industry. Preliminary drawings, coordination drawings, shop drawings, calculations, stocklists, and more. For free quote contact: (281) 256-2789, support@cadfps.com; www.cadfps.com.

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Over 30 years of design experience and has been in operation since 1988. We offer design, survey, and stocklist of any type of sprinkler system. We design for sprinkler contractors all across the country, location is not an issue. Our design staff of five offers: AutoSPRINK design, 3D BIM Modeling, as well as MicroStation. We are NICET Level IV certified. For a design quote contact: Kent Stewart, Kent@stewartfpc.com, (501) 794-6950.

SALES

DES ASSOCIATES offers UL FM Fire Sprinkler Products - Flexible Drops; Fire Pumps; Jockey Pumps; Fire Sprinklers; Butterfly Valves; Commercial and Residential Riser Check Valves; Shotgun Riser Valves; Water & Hose Valves; Adapters & Fittings; Hydrant Accessories; Foam Tanks; Water Storage Tanks - Above Ground Bolted & Welded Steel; and Underground Fiberglass Tanks. DVBE Certificate #2026104 may help you get new business! Please call for pricing!!! Contact: Dennis Sekermestrovich, oldseker@yahoo.com, (951) 541-4045.

Duyar Valve manufactures quality UL FM Valves, Riser Manifolds, Sprinkler Heads, Waterflow Detectors, Pressure Switches, etc. With sales in 85 foreign countries, they recently started selling in the United States. In the Western U.S. and for more information contact: Dennis Sekermestrovich, DES Associates, (951) 541-4045, oldseker@yahoo.com. DVBE Certificate #2026104

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Saved - Apt. Building: A fire was caused by an unplugged air fryer in an apartment kitchen in La Mesa, California. The Symons Fire Protection installed fire sprinklers were triggered and ultimately contained the fire entirely.

According to the property manager, no one was hurt by the fire and the apartment was saved by the fire sprinkler going off.

— Fiona Didato
Symons Fire Protection, Inc.
San Diego, CA

A man was arrested April 7 for allegedly lighting a fire outside the Burlington, VT, office of Senator Bernie Sanders (I-VT). This according to an item by Anumita Kaur, April 7, 2024, The Washington Post.

Security video footage showed a man spraying a liquid near the door of the office, then lighting the area with a handheld lighter. A “significant” blaze began, engulfing the door and hindering multiple staffers from fleeing.

The fire damaged the door’s exterior and the hallway, and set off the building’s sprinklers. The sprinkler system “largely extinguished the fire,” the police department said.



The National Fire Sprinkler Association debuted a successful valve trailer event in Commerce City, CO, at an event hosted by the South Adams County Fire District April 2-4. All the fire departments’ on-duty crews were able to attend the in-class and hands-on training. Three sessions were scheduled each day. This allowed members of at least 14 departments to learn from the trailer.



A highlight of the sessions occurred when about two dozen firefighting cadets were able to attend, as they took a break from their other scheduled duties. The cadets begin their careers in the next few weeks, and will bring with them a sprinkler perspective!

The trailer will remain in Colorado until the **Rocky Mountain Fire Sprinkler Expo on May 18, 2024**. And it will be highlighted at the **Rocky Mountain SFPE Symposium on May 8, 2024**.

A book from one of our own. “**Fun Things to Do in Retirement**,” by Rhonda Gudger has officially launched. Rhonda Gudger is the Executive Director of the AFSA San Diego Chapter. The book is fun and inspiring.

This book is all about embracing your sense of adventure, trying new things, and finding joy in unexpected places.

Look for it on Amazon, and if you like the book, please leave a review.



Each one’s work will be clearly shown [for what it is]; for the day [of judgment] will disclose it, because it is to be revealed with fire, and the fire will test the quality and character and worth of each person’s work.

—1 Corinthians 3:13 (Amplified Bible)

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