



2022

Hot Topics

Helping You Protect Lives And Property

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If You Are Not Servicing Emergency Lighting, Consider It!



For over two decades a phrase that Brooks Equipment coined has never been truer than now—"When you walk into a building look up." Look up at the exit and emergency lights. Why? Because exit and emergency lights are still the most overlooked and neglected portion of most buildings' Balanced Fire Protection.

Increase Safety and Revenue

Every exit or emergency light that you walk under is an opportunity to potentially make more money. By not talking to your customers about the importance of having their exit and emergency lights inspected, you are not maximizing your potential revenue.

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What you need to know about Sky Lanterns

First introduced in 3rd century BC China for signaling between troops, sky lanterns were primarily used later to celebrate special events, like festivals, or just for the fun of it. Today, they are used in weddings, birthday parties, and other celebrations. Unfortunately, they can pose a serious fire hazard. So much so that NFPA has prohibited their use in NFPA 1: *Fire Code*, 2021 Edition, which states: The use of unmanned, free-floating sky lanterns and similar devices utilizing an open flame shall be prohibited.

Basically small hot air balloons that use a flame source (like candles), sky lanterns can float upwards of a mile before descending to the ground. Unfortunately, when they do come down, they can start a fire wherever they land. As a matter of fact, an illegal sky lantern caused a massive fire in Juqueri State Park, in Brazil, in 2021. Sau Paulo State Officials claim sky lanterns are among the top three causes of forest fires each year in their region.

Because they are so dangerous, entire countries have banned their use as well as numerous states across the U.S.



The FAA has raised concerns, too, over the possibility of sky lanterns getting sucked into aircraft engines. And if all this were not enough, some sky lanterns are not biodegradable, creating litter and potential danger to wildlife who get entangled or even eat portions of their fallen remains.

For tips on Sky Lantern Safety, check out this NFPA link: <https://www.nfpa.org/-/media/Files/Public-Education/Resources/Safety-tip-sheets/SkyLanterns.ashx>. ♦

Employee Spotlight

Meet David Rieth, Director of Backflow Sales

With extensive experience in plumbing and backflow sales and service, David was the owner of Water Specialties Company when Brooks acquired them in 2020. His tenure in the industry includes WSC from 1999–2020, ownership of a plumbing and heating supply house from 1985–1999, and working as an apprentice plumber from 1978–1985. A licensed plumber, David also has several backflow certifications.

As Director of Backflow Sales with Brooks, David heads up a team of backflow professionals providing product support and sales, ensuring Brooks customers receive the best service possible. He enjoys helping customers find what they're looking for as well as helping them troubleshoot whatever issues they may be having in the field, be it a backflow with no nameplate or pictures of unidentifiable parts.

When asked what he would do for a career if he weren't doing what he does today, David says, "Being a Major League Umpire." He played ball himself in high school and was on a travel softball team for several years. And he's a huge Boston Red Sox fan.

His mantra is "Treat people the way you would like to be treated." And his favorite place anywhere in the

world is being at home in Melbourne Beach, where he enjoys fishing, body surfing, and the awesome sunsets and sunrises Florida offers.

On another note, David loves his sisters' cooking—especially their Italian meatballs. That's right, I said "sisters"—he has four of them making meatballs for him! Apparently, he gets into trouble a lot with them, because he eats them from the pot before they can reach his plate.

When David's not at work, he spends his time on home improvements, hanging with his family, and watching his children participate in baseball, cheerleading, and gymnastics. And a fun fact about Mr. Rieth is that he holds a 2nd Degree Blackbelt in Kenpo Karate and taught it for almost 10 years before his children were born. ♦



David and his wife of 23 years, Susan



BROOKS APP

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- Create a list for quick future ordering
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- Email or Print your list to share with non-app users



LEARN MORE ABOUT THE BROOKS APP!

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If You Are Not Servicing Emergency Lighting, Consider It!



What's more, not only are you missing an opportunity for more sales, but you are also leaving the door open for a competitor to do the work. Even more important than the financial aspect of doing these inspections is the life safety element. When mere minutes, or even seconds, can be the difference between safe egress and not getting out of a building safely, it is imperative that every exit and emergency light be fully functional. And the only way to ensure that they will work is by performing the Monthly 30-second test as well as the Annual 90-minute test.

Increase Value Added for Every Service Ticket

With the soaring cost of fuel, it is more important than ever before to maximize every service ticket you work on. Adding a monthly and/or annual exit and emergency light inspection can easily double or triple that job ticket.

It has been well established that exit and emergency lights outnumber fire

extinguishers two to one. Plus, besides charging the inspection fee for Monthly and Annual Tests, there will be batteries, lamps, and even new units that will need replacing. That adds up quickly, too, turning a marginal service call into a magnificent service call.

Training Opportunities Available From The FED Learning Center

If you are not servicing exit and emergency lights, you need to be. And if you're not familiar with their operation, service, and installation, the FED Learning Center has a number of Emergency Lighting Courses to help certify your techs so that your company can perform everything necessary to keep your customers' exit and emergency lights operational and compliant. And their courses are available On-Demand (24-7), Virtual Live, or Hands-On In-Person. You can find out more at <https://fedlearningcenter.com/>.

Your Brooks Account Representatives are also ready to help you with all of your exit and emergency lighting product and service needs.

Brooks will soon offer a convenient Start-Up Exit and Emergency Lighting Kit that will include the basics to help you get started - Part# SUELTKIT. ♦



Are you receiving Brooks' Fire Drill emails? Subscribe today for relevant industry information, code and legislation updates, interviews, and more!

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Exit and Emergency Lighting Courses

The Exit and Emergency Lighting courses are designed to provide technicians the history and knowledge of why Exit and Emergency Lighting is important while keeping current on the latest product innovations, how to sell these products and services, being aware of local and national codes, and, most importantly, how to inspect and troubleshoot Emergency Lighting.

Upcoming Courses for Exit and Emergency Lighting

Virtual Live Instruction:

- 9/28
- 10/27
- 11/29

Hands-On Training:

- 9/15 Edison, NJ
- 11/10 Dallas, TX
- 12/8 Charlotte, NC



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For more information or to register for a course,
please visit FEDLearningCenter.com.

A Common Failure in Backflow Prevention Device Testing for Fire Protection Systems

The buildings in your community that have water fire suppression systems are required to have backflow preventers. Those devices are required by the local plumbing or sanitation code in order to keep water from flowing backward and contaminating the drinking water. But unlike other plumbing systems, the fire suppression system is only operated when the annual flow test is conducted or when there is a fire. Since the water does not flow, except for once a year, there is one failure that is typical in almost all backflow preventers for water fire suppression systems. You will need to pay special attention to the second check valve in the backflow prevention device. Here is why failures occur and what you need to do to keep your community's drinking water safe.

Backpressure backflow of water is possible whenever the downstream water pressure exceeds the supply pressure. Without the required backflow preventer in a water fire suppression system (e. g. fire sprinkler system), a backpressure backflow condition would cause a backflow of water, meaning a reversal of water flow in the system and contamination of the drinking water.

A backpressure backflow condition is due to an increase in downstream pressure that is higher than the supply pressure. This can happen at night when there is little demand for water as businesses, like restaurants, shut down for the night. It also happens when there is thermal expansion, such as when a building is cold and is then heated. Whatever the reason, a higher pressure on the downstream side exerts pressure on the last check valve (second check valve) in the backflow prevention device.

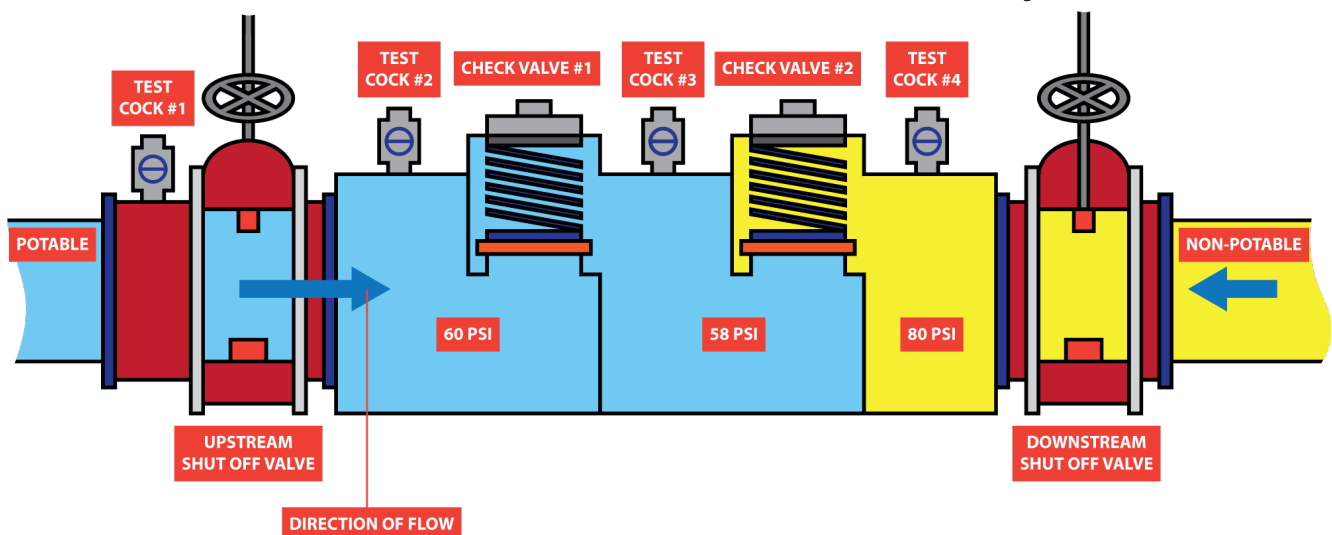
That backpressure gets trapped behind the valve disc or downstream of that second check valve.

The actual seal of the check valve seat relies on the rubber disc in the valve, which when closed and operating correctly creates a seal to the valve seat. This seal effectively prevents water from flowing past it and back into the drinking water supply. While it is the best method for mechanically sealing and preventing water from moving past the second check valve and back into the drinking water supply, it is also doomed to failure over time due to the nature of the rubber material to deform and deteriorate, caused by the constant pressure exerted on it by the backpressure of the fire suppression system.

Potential backpressure backflow is created whenever the downstream pressure exceeds the supply pressure. This will start to increase once the annual backflow test is completed and the system is put back into commission. Although there are devices like expansion tanks and pressure-relief valves that are intended to reduce some of the excessive pressure, there will always be pressure on the downstream side and therefore pressure on the rubber disc on the second check valve. The pressure remains until the next annual main-drain test on the fire suppression system. That pressure is what causes the rubber disc to deform and deteriorate over time, which eventually allows the pressures to equalize before and after the check valve.

There are two drivers for performing annual testing of backflow prevention devices. NFPA 25, *Standard for Inspection, Testing, and Maintenance of Water-Based Systems*, requires a forward flow test to ensure adequate

Double Check Valve Device Assembly



water supply for sprinklers and other system components for fire extinguishment. The second driver is your local plumbing code, which requires annual testing of backflow preventers to ensure they are doing their job of preventing reversed water flow into the drinking water. To perform the operational test to ensure that there is no reversed flow, you will need to take pressure gauge readings using the four test cocks on double check valve backflow prevention devices. Those readings provide indications of problematic components that need either cleaning or replacement.

While performing the annual test on a double check valve backflow prevention device, you can determine that the second check valve is experiencing a failure if the pressure gauge reading at test cock #3 (TC#3) and TC#4 is the same (see diagram). A failure means that the valve is fouled (debris preventing full closure) or the rubber disc

has worn to the point that it does not seal and allows flow and equalization of the pressures upstream and downstream of the second check valve. When this happens, you must disassemble the valve and check for debris and examine the rubber disc. After you have removed debris, replaced or cleaned the rubber disc and valve seat (creating a tight seal), you can then perform another test. You will know that you have resolved the problem when the pressure gauge reading is higher at TC#4 than at TC#3 with the fire suppression system back in operational condition.

Your customers expect their fire system devices to be code compliant and to keep their community's drinking water safe. Anticipating the need to clean debris and possibly replace the second check valve rubber disc will save you time and keep your customers satisfied and their systems reliably safe. Knowledgeable technicians make for satisfied customers. ♦

Legislation & Code

Implementation Expected for NDAA Mandate for Extinguishers at Military Bases

National Defense Authorization Act (NDAA), for Fiscal Year 2022, requires fire extinguishers to be installed within military facilities in accordance with NFPA 1, *Fire Code*. The new law came about due to a deficiency in the building code for the Department of Defense (DoD), called the Uniform Facilities Criteria (UFC). The current UFC allows extinguishers to be removed if a building has a sprinkler system and a fire alarm. The 2022 NDAA requires portable fire extinguishers for DoD facilities. The Act was signed into law in December, 2021. Although the NDAA became law, implementation has been slow and the UFC has yet to be updated.

The Government Relations Committee (GRC) of the Fire Equipment Manufacturers Association (FEMA) has met recently, by phone, with the offices of congress and then went to Washington, DC, on July 12 and 13, 2022, to meet with congressional staffers. Those in-person meetings, arranged by Rasky Partners, included staff from Sen. Tillis (R-NC), Sen. Shelby (R-Ala), Rep. Adams (D-NC), Rep. Rogers (R-Ala), and Rep. Palmer (R-Ala). These senators and representatives are in full support of an equivalent level of safety for US military personnel with the civilian side (state fire codes). FEMA GRC will continue to push for implementation of the NDAA.

FEMA GRC Meets with USFA on Extinguisher Use

The FEMA GRC met by conference call on July 15, 2022, with Dr. Lori Moore-Merrell, US Fire Administrator and Tonya Hoover, Deputy US Fire Administrator. United States Fire Administration (USFA) is in the process of updating their method for collecting data on fires in the US. The purpose of the meeting was to ensure that data on fire extinguisher use is included in USFA data collection efforts. The Request for Proposals (RFP) will be later this year and the new system will be online by 2025. Unlike the old pen-and-paper system, data for the new system will be entered by smart phone. Also, USFA is looking to capture data on all fires, rather than just those with fire department responses. This new system is expected to capture data on fires, where extinguishers are used successfully but are often unreported. ♦



*Mark Conroy, Brooks Equipment;
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Start-Up Extinguisher Service Kit, SUFXKIT



Brooks' **START-UP KIT** easily outfits your truck for servicing fire extinguishers. Contents include a dry chemical recharge kit ([DCRK](#)), valve stem kit ([VSKIT](#)), O-ring kit ([ORKIT](#)), rivet kit ([RKIT](#)), 100 new-type pull pins ([NPP](#)), 50 comfort masks ([RP9500](#)), valve cleaning brushes ([VCB](#), [NB](#), [TB](#)), scales ([501](#), [605](#)), tube of lubricant ([OLUBE2](#)), clear parts box ([LPC16](#)), and a parts bin rack ([PBR1](#)).

You can find all of these tools and more in the **SUFXKIT** at Brooks.
Ask your Account Manager for more details.

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