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American Society of
Plumbing Engineers™

BALTIMORE

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MEETING FORMAT

6:00 – 6:30	Social
6:30 – 6:45	Announcements & Table Tops
6:45	Dinner Served
7:00 – 8:00	Presentation

DATE:	December 14, 2022
TIME:	6:00pm to 8:00pm
PLACE:	Olive Grove Restaurant
TOPIC:	Natural Gas Piping System
SPEAKER:	OmegaFlex

[Register Today](#)

ASPE Baltimore Chapter is celebrating 500 followers on LinkedIn!

Thank you to our followers, and if you don't already, please follow us on LinkedIn to stay up to date with chapter, region and national ASPE activities.



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*Local Chapters are not authorized to speak for the Society.
Newsletter questions? Please contact [Nikita Patel](#)*



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Julian.Chiveral@gmail.com



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Mueller Associates
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Sherman Engineering Company
npatel@shermanengineering.com



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Min Engineering, Inc.
Matt.Obenchain@minengineering.com



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Jeffrey Edwards, CPD, GPD
Retired
JWEdwards33049@gmail.com

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- As a paid advertiser, you will have your advertisement in the newsletter for one full year (9 editions) and company logo displayed on the Chapter website.
- Ads for the year will begin in the September issue and run through the May issue.
- All ads must be paid in full prior to the advertisement being included in the newsletter.
- Advertiser must provide ads in high resolution PDF format. Logo must be provided in .jpeg format, 200px wide size
- Cost per advertisement is as follows:
 - Full Page \$ 750.00
 - Half Page \$ 500.00
- Please contact Nikita Patel or Chuck Swope
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Chuck Swope, PE, CPD, LEED AP BD+C
Chapter President

The President's Report

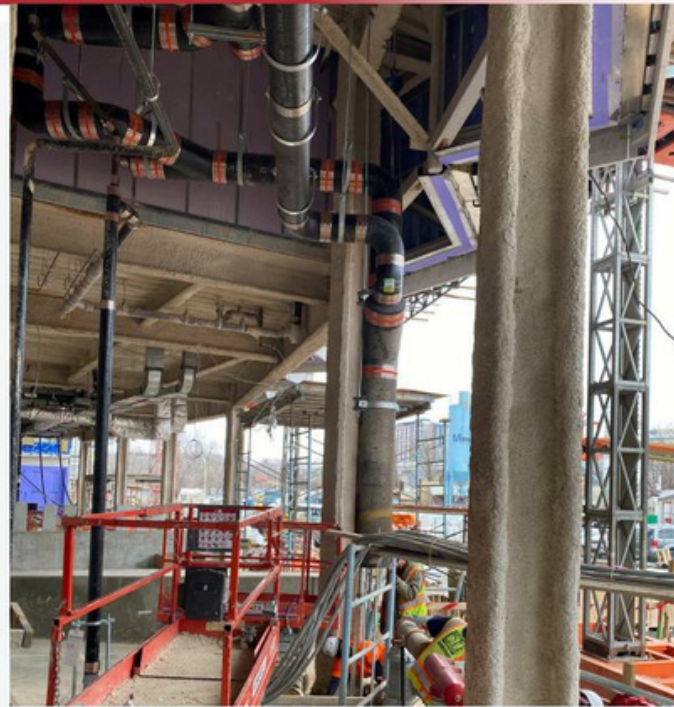


Let's start off with a quote from one of my favorite Christmas stories, "Yippie Ki-yay,"

... wait, that's not appropriate... Let's try "All that you can take with you is that which you have given away" . I could be misremembering, but I don't even think it was a spoken line. It was a motto under Pa Bailey's portrait in a scene from "It's a Wonderful Life". The intent isn't necessarily up to interpretation, it means that your possessions don't define you, your actions do. You could see that quote as a cautionary tale, or as I see it, one of generosity. Let's keep each other in mind this holiday season and throughout the year.

Platitudes aside, we have an exciting second half of the ASPE technical season ahead of us. There are still excellent regular technical topics at our in-person meetings, but there's even more in store for us. We have an upcoming Virtual Joint meeting with ASHRAE on Heat Pump Water Heating, a joint meeting with our Philadelphia Chapter (Virtual of course), hands on event with the Local 486 Plumbers and Steam Fitters Union, Summer Party, and more! I may be taking the wind out of Julian's sails a little, but you can see that I'm very proud of what the Baltimore Chapter offers our members and soon-to-be members. Please check out Julian's article, this newsletter, and our website for more information.

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ENGINEERING GREAT EXPERIENCES

Joint Baltimore ASPE-ASHRAE Lunch Meeting

Special thanks to Terry Schroeder for coordinating a great joint event between our local ASHRAE and ASPE chapters. We look forward to more collaboration in the coming months!



Coming Soon!

DATE: January 5, 2023
TIME: 12:00-1:30PM
PLACE: VIRTUAL
TOPIC: Heat Pump Water Heating for Commercial Domestic Hot Water Applications
SPEAKER: Mitsubishi Electric Trane

\$0.00 Member Ticket

\$10.00 Non-Member Ticket

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Julian Chiveral, LEED AP BD+C
Vice President- Technical

Technical Report

November was great. Delicious food, a little time off for the holidays, and as always, an insightful ASPE meeting. Thank you to everyone who attended our Monday night meeting, and my gratitude especially goes out to Lauren Berenato, who led a great discussion about material selection in the plumbing world. I think I learned more materials science during her presentation than I did during my four years at university. Did you know that some “bronzes” are actually brass? Good luck catching that the next time you’re working on specifications or submittals! If you have any follow up questions from the presentation, Lauren’s email is Lauren.Berenato@Jomar.com.

I have a special holiday treat for everyone this month – we have not one, but TWO upcoming technical learning opportunities! We will be hosting our December meeting in the traditional format on December 14th, as well as partnering with the Baltimore ASHRAE chapter for a virtual lunchtime technical session on January 5th.

Our standard meeting will feature a presentation from OmegaFlex. You’ll be on the edge of your seat as we learn the ins and outs about natural gas design. This meeting surely won’t be one you want to miss!

We’ll also have the opportunity to start 2023 with a seminar on heat pump water heating for commercial domestic hot water applications, presented by Chris Terranova and George Whenert from Mitsubishi Electric Trane. The virtual session will start at 12PM on the 5th and is free to all ASPE and ASHRAE members. Don’t forget to register for this session when you sign up for our December meeting!

Best,
Julian Chiveral, LEED AP BD+C
Vice President - Technical

Designing to Combat Legionella

Proper design of domestic water systems and use of standards are key to mitigating Legionella bacteria in facilities.

August 5, 2022



The United States has one of the safest drinking water supplies in the world. However, the water we use for drinking, swimming and even cooling high-rise buildings still can have adverse health effects. The Centers for Disease Control and Prevention (CDC) reports that about 7.2 million Americans get sick every year from diseases spread through water.

Two of the most prevalent illnesses contracted through water-borne bacteria – Legionnaires’ Disease and Pontiac fever – are caused by Legionella bacteria. Legionnaires’ Disease is a serious type of pneumonia (lung infection), while Pontiac fever is a milder infection that usually gets better without medical care.

According to the CDC, the first identified cases of Pontiac fever occurred in 1968 among workers and visitors at the health department in Pontiac, Mich. (<https://bit.ly/3u2qaa7>). In 1976, 221 people who had attended an American Legion convention in Philadelphia contracted a type of pneumonia that eventually became known as Legionnaires’ Disease; 34 of the infected people died (<https://nyti.ms/3yIotYa>).

Following these incidents, public health officials were able to show that Legionella bacteria causes both diseases.

Present in Most Water Sources

Legionella bacteria are present in most natural water sources, often in very low or undetectable concentrations. Eliminating the uncontrolled growth of Legionella in building water systems is the central mechanism for managing the risk of disease. However, complete elimination of the bacteria is difficult to achieve, if not impossible; it is always being reintroduced from the water system.

Municipal water is typically dosed with a disinfectant, often chlorine. This is intended to establish and carry a persistent, protective disinfectant residual to reduce the presence of disease-causing organisms. However, treated drinking water is not required to be free of all microorganisms. Treated water flows through the water distribution system, including water mains, where it is re-subjected to biofilm formations and other microbial colonization. As a result, water entering buildings is a source for Legionella.

Building water systems also have characteristics that can make them prone to biofilm formation, colonization and Legionella growth. Things such as water temperature, no remaining municipal residual disinfectant, water age, cross-connections to other untreated sources, materials, and accumulation of sediment can all contribute to its growth.

For a person to contract Legionnaires' Disease, several events must occur:

- **Entry:** The pathogen must gain entry into the water system. This can be from low disinfectant residual levels or water supply disruptions.
- **Growth:** Factors such as temperature, disinfectant residual, design, dirt/sediment, nutrients and microbial associations can contribute to the growth of bacteria.
- **Transmission:** Legionella must be inhaled to infect a human host, and the disease doesn't spread from person to person. Instead, the bacteria is spread through mist inhaled from sources such as faucets, showerheads, cooling towers, fountains, spas and similar equipment.
- **Exposure to a susceptible human host:** Not all humans will contract Legionnaires' Disease. Several factors make it more likely, however, for the bacteria to overcome a host's defenses. Adults over the age of 50 and people with weak immune systems, chronic lung disease or heavy tobacco use are most at risk. Symptoms of those infected include cough, fever, chills, shortness of breath, muscle aches, headaches and diarrhea.

Risk Factors for Buildings

While Legionella is present in most water sources, some buildings are more susceptible to outbreaks than others. Several publications provide information on reducing the risk of Legionella; one of the most referenced is ASHRAE Standard 188-2018, Legionellosis: Risk Management for Building Water Systems.

Written with codified language with the intent that regulating bodies will adopt as code, Standard 188 includes steps for design teams to take during the design process and steps for owners to take during operations and maintenance to minimize Legionella risk throughout the building's life.

Standard 188 may be applicable to most building types; however, it tends to focus on multiple housing units, health-care facilities or buildings with immunocompromised occupants.

It also requires owners to establish a risk management plan. This includes a system analysis of hazardous conditions, identification of required control measures and control limits for hazardous conditions (e.g., maximum and minimum values), a system for monitoring the parameters and limits, corrective actions when parameters are outside appropriate limits, and confirmation that the program is being implemented.

ASHRAE 188 also provides a checklist to help determine if a building is at a higher risk for Legionella bacteria. Key building risk factors include:

1. Hot water system design temperature. Building codes often require water temperatures at lavatories and showers to be 115 F or less, which is right in the Legionella prime growth range. Key temperature benchmarks to know:

- a. Below 68 F: Legionella survive but are dormant
- b. 68 F to 122 F: Legionella thrives in this prime growth range
- c. 131 F: Legionella bacteria die within five to six hours
- d. 140 F: Legionella bacteria die within 32 minutes
- e. 151 F: Legionella bacteria die within two minutes
- f. 158 F: True disinfection level – instantaneous kill of bacteria

Understanding these temperature ranges helps establish system designs. Many domestic hot water systems are designed to store and circulate at 140 F. Locating the mixing valves at the point of use instead of at the source minimizes the volume of the system in the prime growth range.

2. Infrequently used pipes, also called dead legs, with low-flow or no-flow conditions. As the water ages, the disinfectant can lose its effectiveness, sediment can build up and the water can reach room temperature – all of which can promote Legionella growth.

Designs should eliminate dead legs to reduce the age of the water. Strategies include properly sizing the pipe to increase water velocity, including purge or drain valves, and adding recirculation through piping, storage and expansion tanks.

3. Ornamental water features. These are often exposed for occupants to enjoy, but they easily operate at prime Legionella growth temperatures. Building owners should discuss the design and operation of the features with the manufacturer or designer to minimize the risk of growth and transmission of the bacteria. Appropriate design features may include chilling, filtering or chemically treating the water.

4. Cooling towers. These evaporative systems are used to reject, to the atmosphere, the heat transferred to the circulating water from equipment used to cool a building. Growth and transmission of Legionella in evaporative heat rejection systems are linked to the quality of the supply water, the quality of circulating water, stagnate conditions during periods of intermittent operation (systems that are idle without draining), and periods when water treatment is stopped or absent.

Legionella bacteria can grow on wet surfaces and in the basins of cooling towers, which generally operate in the prime growth range of 68 F to 100 F. The bacteria can become airborne by the fan circulating air through the tower. The risk can be minimized by ensuring:

- a. Water has little opportunity to remain stagnate in the basins;
- b. Basins have a positive slope to the outlet;
- c. Chemical treatment including disinfection as well as corrosion protection;
- d. Chemical treatment feed system is functioning properly;
- e. Regular testing of the water;
- f. Placement of towers away from air intakes and immunocompromised occupants.

Another ASHRAE publication, Guideline 12-2020, when used in conjunction with Standard 188-2018, can provide prescriptive guidance for operators of water management systems to control Legionellosis in building water systems.

Reducing Risk to Occupants

Maintaining appropriate water temperatures, limiting stagnate water, reducing bacteria food sources and ensuring circulation pumps are operational are all critical steps for reducing the risk of Legionella to occupants. Reducing water age also is important; seldom-used branches should be periodically flushed through end-of-line fixtures or through dump valves. (Dump valves may be a hose valve or manual valve that may be opened to discharge water.)

Water and fixtures should be tested regularly. If the tests reveal control limits are exceeded, owners should follow through with corrective actions as set forth in their established risk management plan. Corrective actions may include thermally shocking the entire system with hot water (e.g., 160 F), actively flushing the entire system, chemically cleaning fixtures or introducing supplemental disinfection to the system.

A comprehensive approach to water safety — including the steps set forth in this article, from design through operational corrections — can minimize any building's risk of Legionella bacteria and the potential contraction of Legionnaires' Disease by occupants.

Dave Bodenschatz, PE, LEED AP, is the director of mechanical engineering for IMEG Corp.'s Technical Operations Team, which provides the firm's designers with the latest industry knowledge, standards and tools.

Wade Ross, PE, is a project executive with IMEG Corp. He is a mechanical engineer with expertise in the design of infrastructure systems and master planning for health-care, government and industrial facilities, including central utility plants.



Nikita Patel, EIT, MBA
(Region 1) AYP Liaison | Education Chair



AYP Report

Hello friends! I have some exciting news to share. I have recently been appointed AYP Liaison to the Board of Directors and will soon give up my post as AYP Liaison for the Baltimore Chapter. **If you, or a young professional you work with is interested in taking over this role, please reach out to me, and I can share information regarding the responsibilities of this position.**

I have been working behind the scenes with ASHRAE to set up a joint ASPE/ASHRAE Top Golf Event. We have this tentatively scheduled for Tuesday, March 14, 2023. Watch out for more information on this. It will be FREE to AYP members.

While I will step away from the chapter role, I will still continue on as Region 1 AYP Liaison. The region's AYP liaisons have prepared a great list of educational webinars that will take place quarterly throughout 2023.

- January 11, 2023 Revit Workshop*
- March 15, 2023 Engineering, Sizing and Selection for Boilers and Cooling Towers
- June 21, 202 Valves 101: Materials and Applications
- September 20, 2023 Engineering, Sizing and Selection of Water Heating Solutions
- December 13, 2023 General Code Information**

Watch your emails for a separate email blast from the chapter with information on signing up for each of these webinars. They will all take place from 12-1PM.

* The Revit Workshop will serve as our kick-off meeting to promote ASPE Membership. It will be free to all YP's regardless of membership status. All subsequent webinars will be free for ASPE members only, and require a fee from non-members.

** The code webinar will be led by a national code official so it can remain relevant across chapters. The speaker will likely be representing IAPMO, ASSE, NFPA, or another national code entity.

Education Report

ASPE Baltimore is scheduled to speak to a group of High School Students & Advisors on Friday, February 17th in celebration of Engineers' Week. This will be hosted at the Engineers' Club of Baltimore. If your company is interested in helping (donations, tabletop, speaker), please contact me directly for more information.

Additionally, I am working with the Local UA486 to prepare another hands-on training event for our Engineering Community. We have just begun planning it, so dates are not finalized at this time. Continue to read this section of the newsletter to learn more.

Thanks,
Nikita Patel, EIT, MBA
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Chris Imhof, PE, CPD
Vice President- Legislative

Legislative Report

Montgomery County Approves Bill to Ban Fossil Fuel Use in Most New Buildings

The Montgomery County Council voted unanimously to approve the Comprehensive Building Decarbonization bill, which will ban fossil fuels, such as gas heating, from almost all newly-constructed buildings by 2026.

There are exceptions. The ban will not apply to hospitals or other facilities that need emergency backup systems, such as generators, or buildings that need commercial cooking facilities.

The D.C. Council recently passed a similar bill to require all-electric buildings by 2026; however, the Construction Codes Coordinating Board, a voluntary board that creates amendments for D.C. building codes, rejected the proposal. The legislation passed by the D.C. Council still requires builders to adopt the all-electric regulations, regardless of the codes board outcome.

You can read the bill here:

https://www.montgomerycountymd.gov/council/Resources/Files/agenda/col/2022/20221129/20221129_15C.pdf

Source: <https://wtop.com/business-finance/2022/11/montgomery-county-approves-bill-to-ban-fossil-fuel-use-in-most-new-buildings/>

A reminder that “HB 1052 – Public Safety – Gas Piping Systems – Construction Requirements” is effective as of October 1, 2022. This bill prohibits the use of non-arc-resistant corrugated stainless-steel tubing (CSST) to be used in the construction of fuel gas piping systems in residential and commercial certain buildings; and generally relating to fuel gas piping systems.

Chris Imhof, PE, CPD
Vice President – Legislative



ARE YOU RESPONSIBLE FOR DESIGNING MEDICAL GAS SYSTEMS?



Earlier this year, I had the opportunity to take (and passed) the ASSE 6060 course led by Mark Allen.

As the local sales rep for BeaconMedaes, I have worked with Mark, and medical gases, for years.

If you are responsible for designing medical gas systems, read on to see why you need to take this class!

Nikita Patel, EIT, MBA
ASSE 6060
Sales Engineer



01

Growing Healthcare Industry
The healthcare industry is growing rapidly and designing a facility that meets code requirements and owner preferences will be made easier after completion of this course.

02

Code Requirements
Although it's not a current code requirement for medical gas designers to have this credential, it will be something we foresee being written into many specifications, and possibly even AHJ requirements.

03

Engaging the Facility AHJ
As Designers and Engineers, I'm sure you've been asked to make decisions for a project that are the responsibility of the owner. This course helps you navigate those conversations to avoid bearing that responsibility as the designer.

04

Professional Growth
With this credential, you can seamlessly transition into medical gas design with minimal support from supervisors, helping you become a true medical gas design expert

05

Class + Credential
Unlike other companies hosting this course, this class hosted by Sherman Engineering will include both the course led by Mark Allen, as well as the course exam, proctored by MGTC.

[LEARN MORE](#)

the ENGINEERS CLUB & Engineers Week Council invite you to Engineers Week

Since 1951, National Engineers Week has helped to increase public awareness and appreciation of the engineering profession and to celebrate the accomplishments of engineers. Join us at the Engineers Club and the Baltimore Museum of Industry for the many activities celebrating National Engineers Week and the Maryland Engineering Challenges.

MARKING

the 72nd

Anniversary of

NATIONAL ENGINEERS WEEK

Engineers Week Activities

Meet Maryland's most prominent engineers & technology educators at these activities.

National Engineers Week was founded in 1951 by The National Society of Professional Engineers and is celebrated annually at the time of George Washington's Birthday. Our first president was a military engineer and a land surveyor. Like our first president, today's engineers are problem solvers. They design, develop and oversee the design, manufacture and construction of products, machines and structures. Engineers Week is a time to recognize the contributions engineers have made to our way of life and to encourage students to pursue engineering careers to perpetuate advancements for future generations.

The Engineers Club and its affiliated Associate Societies encourage everyone to come out and support these activities at The Garrett-Jacobs Mansion, 11 West Mount Vernon Place and The Baltimore Museum of Industry, 1415 Key Highway.

For more information call 410-539-6914 or log on to www.esb.org. For information on other challenges in the Maryland Engineering Challenges Series, visit the Baltimore Museum of Industry website at www.thebmi.org, and click the Programs link.

ALL OF THE ACTIVITIES ARE AT THE ENGINEERS CLUB UNLESS OTHERWISE NOTED
FOR MORE INFORMATION, CONTACT LEANNE HARRIS AT LHARRIS@JMT.COM

Happy **72nd** NATIONAL ENGINEERS WEEK!

Friday	February 17 th	ASPE Program - Plumbing System Design & Public Health A fun-filled Program and Luncheon for High School Students & Advisors to learn about the different facets of Plumbing and Plumbing Engineering. Plumbing protects public health and encompasses a wide range of things you use on a daily basis—from the appliances in your house, to those in public spaces like schools and hospitals, a team of Plumbing experts have had a hand in making sure it's safe for use. Join us to learn more!
	10 am to 1:30 pm	
Tuesday	February 21 st	ASHRAE Program – Green Building Technology A Program & Luncheon for High School Students & Advisors to meet with engineers, discuss career opportunities & complete a design challenge using Green Building Technology.
	10 am to 1:30 pm	
Wednesday	February 22 nd	Consider a Career in Engineering – A Program & Luncheon For Middle & High School Students & Advisors to introduce them to the different branches of civil engineering & show them how a team of engineers interacts to design and construct a project. Presented by the ACEC/MD, MDOT SHA & the Maryland Quality Initiative (MdQI) Industry Outreach Subcommittee; https://students.mdqi.org
	10 am to 1:30 pm	
Thursday	February 23 rd	WTS - Introduce a Girl to Engineering – A National Event Program & Luncheon A Program and Luncheon for High School Girls & Advisors to introduce them to the field of civil engineering, provide an opportunity to hear from successful women who have made a career in the transportation industry and to practice what they have learned via several fun hands on activities. Presented by the Women's Transportation Seminar (WTS) Baltimore Chapter
	10 am to 1:30 pm	
Thursday	February 23 rd	NSA and CAMI - Cybersecurity Day– A Program & Luncheon An interactive program & luncheon for High School Students & Advisors to experience the National Security Agency's (NSA) use of cybersecurity to protect our nation from foreign advisories, and the career paths available within the cybersecurity field. Participants will also have an opportunity to meet and speak with cybersecurity experts, and learn more about student programs that NSA offers. Dreamport (7000 Columbia Gateway Dr Suite 150, Columbia, MD 21046)
	10 am to 1:30 pm	
Friday	February 24 th	MDOT - Technology in Transportation - A Program & Luncheon A Program & Luncheon for introducing Middle School Students to the steps the Maryland Department of Transportation (MDOT) takes to plan, design, construct and maintain roads/bridges using various modules of interactive technology. Presented by MDOT
	10 am to 1:30 pm	
Friday	February 24 th	MITAGS & Sail Baltimore – Introduction to Maritime Training and Simulation- A Program & Luncheon Program & Luncheon to introduce Middle & High School Students to the maritime industry and the significant role it plays in much of everyday life. Many of the products we use or consume daily are shipped to local stores from overseas and our Maritime workers make this possible. Students will hear from ship captains and local pilots and will participate in fun hands-on activities like knot tying and compass navigation. They will have an immersive experience on one of MITAGS full-mission ship simulators, which are the largest in North America. Presented by MITAGS (Maritime Institute of Technology and Graduate Studies) & Sail Baltimore (692 Maritime Blvd. Linthicum Heights, MD 21090)
	10 am to 2 pm	



CELEBRATE

ENGINEERING Jan-April 2023

Maryland Engineering Challenges at the Baltimore Museum of Industry

For more information contact Jessica Celmer by email: challenges@thebmi.org, or visit <https://bit.ly/BMIChallenges>

Baltimore Museum of Industry



Engineering Challenge	Dates in 2023	Individual Event Sponsors
Future City	January 14 th	Sponsored by the MD Society of Professional Engineers, American Society of Civil Engineers, American Society of Highway Engineers & Society of American Military Engineers
Wood Bridge	February 4 th	Co-sponsored by the MDSPE & ASCE
Straw Bridge	February 4 th	American Society of Mechanical Engineers, Baltimore Section
Safe Racer	March 11 th	Whitney, Bailey, Cox & Magnani, Wallace Montgomery Employee Team
Robot	April 30 th	Institute of Electronic & Electrical Engineers
Cargo Ship	April 22 nd	Technology & Engineering Educators Association of Maryland
Paper Airplane	April 22 nd	American Institute of Aeronautics & Astronautics, Mid-Atlantic Section
Hovercraft	April 22 nd	American Institute of Chemical Engineers, MD Section

Be Creative DISCOVER Celebrate
 TRAVEL EXPLORE CHANGE THE WORLD
 COLLABORATE Solve Problems
 Make a Difference COMMUNICATE

Happy **72nd** NATIONAL ENGINEERS WEEK!

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CELEBRATING THE WAY THE WORLD WASHES

NEW! Digital Mixing Valve Recirculation Stations



Key features

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- Temperature/pressure gauges on inlets
- Outlet setup and air purge connections
- Return line with circulating pump and check valves
- Easy installation and serviceability
- Electrical outlet
- Mounted to enamel-coated strut
- See technical data for available configurations



The Need: DHWR systems need to be balanced to ensure that hot water is available throughout a building on every floor, at every fixture, at all times.

The Problem: A building typically requires multiple branches off the hot water supply line, and water flows in the path of least resistance which constantly changes in dynamic, open systems. Manual balancing valves and fixed flow devices rely on flow and pressure calculations and cannot respond dynamically to changing needs.

The Solution: Install a CircuitSolver® at the end of each branch, downstream of the last fixture, and the system balances itself.

How it Works: The thermal actuator at the heart of the CircuitSolver® modulates the valve between open and closed in response to changing water temperature. This continuous response to temperature variation enables each hot water branch to quickly and consistently direct hot water flow to where it is needed – No manual balancing required.

Note: The valve never fully closes, allowing a small amount of bypass flow to the return to avoid deadheading the recirculation pump.

CircuitSolver® Placement Do's and Don'ts

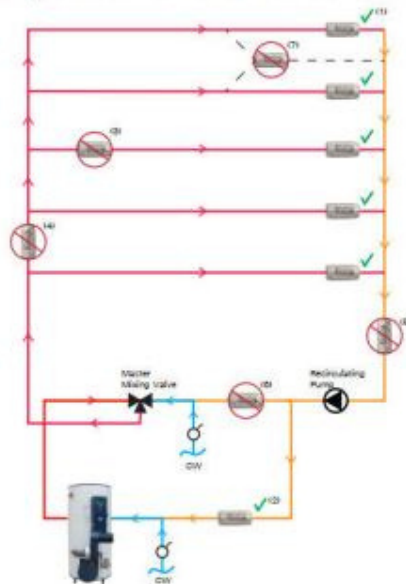
- (1) ✓ at the end of each branch/riser
- (2) ✓ in the return line back to the water heater
- (3) ✗ not in the middle of a branch/riser
- (4) ✗ not in a supply line
- (5) ✗ not in the return line
- (6) ✗ not after the recirculating pump
- (7) ✗ don't combine 2 branches/ risers

Valve Selection

Size: Select the size equivalent to the branch/riser feeding the return line.

Temperature: Select the set-point temperature equal to the desired return temperature.

Example: A standard CircuitSolver® installed on a 3/4" branch/riser with a 120°F return temperature would be CS-3/4-120.



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The IntelliStation®, with its large-capacity valves, is designed for use in hospitals, universities, and large hotels. The digital water mixing and recirculation solution can be integrated into a building automation system (BAS) to allow facilities managers to remotely monitor and control water temperatures. Help mitigate Legionella and other waterborne pathogens with the high-temperature sanitization mode. Key capabilities include a digital temperature regulation within +/-2°F to ASSE 1017, even during low and zero demand periods, and is field configurable without the need for a laptop or special software.



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DURAGUARD® PRODUCT LINE



Public health and safety are a common concern. Targeted for commercial applications, Bemis has a comprehensive offering of seats with DuraGuard® Antimicrobial Built-In Seat Protection™ and STAY·TITE™.

WHAT IS DURAGUARD?

DuraGuard is an antimicrobial property built into the toilet seat to inhibit the growth of bacteria. The active ingredient in DuraGuard is zinc pyrithione, a non-VOC (volatile organic compound), broad-spectrum, highly effective antimicrobial agent used to control mold, mildew, yeasts, fungi, algae, gram positive and negative bacteria. DuraGuard does not protect users or others against bacteria, viruses, germs, or other disease-causing organisms.

WHAT IS STAY·TITE?

STAY·TITE Seat Fastening System™ anchors the toilet seat to the bowl by using a patented bolt design with a finned bushing and glass-filled nylon nut, eliminating the need to retighten the seat to the bowl after installation.

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ADDITIONAL INFORMATION**

OFFICE



HOSPITALITY



SCHOOLS



HEALTHCARE



Schedule of Events

<u>DATE</u>	<u>TOPIC</u>	<u>PRESENTER</u>
SEPTEMBER 9	Enhance Revit Design to Increase Design Efficiency	Microdesk - Boston Chapter
SEPTEMBER 15	Industry Night on the Terrace	MCA
SEPTEMBER 28	Lab Gas Design Using the NIH DRM	Sherman Engineering - Nikita Patel
OCTOBER 26	Commercial Water Softening & RO Systems	Canature Water Group
NOVEMBER 14*	Valve Material Applications	Jomar - Lauren Berenato
DECEMBER 14	Natural Gas Design	OmegaFlex
JANUARY 25	VPMIA Code Review	Amtron
FEBRUARY 19-25	Engineer's Week	-
FEBRUARY 22	Sprinkler Design	UMD - Ken Isman
MARCH 22	Fire Pumps	STH
APRIL 26	Booster Pumps	QuantumFlo
APRIL TBD	Annual Golf Outing	-
MAY 24	WSSC Code Update	WSSC - Chris Imhof
SUMMER 2023	Summer Holiday Party	-

**Please note, this meeting will be held on a Monday*

**MONTHLY
SPONSORSHIP
OPPORTUNITIES**

Tabletop Presentations: \$100 to provide a tabletop presentation of equipment or material relative to the plumbing profession. The tabletops will be set up from the beginning to the end of the monthly meeting and provides the opportunity to provide a brief (under 5 minutes) presentation.

Please make checks payable to the Baltimore Chapter of ASPE. Contact Kathy Dwyer or Chuck Swope if interested