



## IN THIS ISSUE



|                             |         |
|-----------------------------|---------|
| Board of Directors          | Page 2  |
| President's Report          | Page 5  |
| Treasurer's Report          | Page 10 |
| VP Technical Report         | Page 12 |
| Tech Corner                 | Page 14 |
| Membership/Affiliate Report | Page 22 |
| VP Legislative Report       | Page 24 |
| AYP Report                  | Page 27 |
| Education Report            | Page 31 |
| Plumbing Plan Review Corner | Page 34 |

## MEETING FORMAT

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

|          |                                 |
|----------|---------------------------------|
| DATE:    | October 21, 2026                |
| TIME:    | 6:00pm to 8:00pm                |
| PLACE:   | <a href="#">Little Havana</a>   |
| TOPIC:   | Water Heater DOE Updates        |
| SPEAKER: | Lauren Berenato, Bradford White |

[Register Today](#)



1325 KEY HWY, BALTIMORE, MD 21230  
PHONE: 410-837-9903

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



# ASPE Baltimore Board of Directors



## **President**

Julian Chival, PE, CPD, LEED AP BD+C  
CMTA  
Julian.Chival@cmta.com



## **Vice President- Technical**

Justin Saelens, LEED AP BD+C  
Mueller Associates Inc  
JSaelens@muellerassoc.com



## **Vice President- Legislative**

Christopher Imhof, PE, CPD  
WSSC  
Christopher.Imhof@wsscwater.com



## **Vice President- Membership & Newsletter Editor**

Nicole Murphy  
Harry Eklof & Associates  
nmurphy@harryeklof.com



## **Treasurer & Past President**

Chuck Swope, PE, CPD, LEED AP BD+C  
Mueller Associates  
CSwope@muellerassoc.com



## **Affiliate Liaison**

Kathleen Dwyer-Stephens  
EJ Dwyer Company, Inc.  
KDwyer@ejdwyer.com



## **Women of ASPE- Liaison**

Karen Schulte, PE, CPD  
Mueller Associates  
KSchulte@muellerassoc.com



## **ASPE Young Professionals Liaison**

Abbie La Porta  
Mueller Associates Inc  
ALaporta@muellerassoc.com



## **Corresponding Secretary**

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



## **Historian & Scholarship Chair**

Jason J. Eagles  
Bay Associates Group  
Jason@bayassociates.com



## **Education Committee Chair**

Sepideh McQuay  
sepidehkamali2017@gmail.com

## Newsletter Advertising

- Stainless Steel Sponsor – \$1,000
  - Full-page newsletter advertisement
  - Company logo displayed at chapter meetings and on the ASPE Baltimore website
  - One complimentary tabletop opportunity
- Copper Sponsor – \$750
  - Full-page newsletter advertisement
  - Company logo displayed at chapter meetings and on the ASPE Baltimore website

- Brass Sponsor – \$500
  - Half-page newsletter advertisement
  - Company logo displayed at chapter meetings and on the ASPE Baltimore website

Please contact Nicole Murphy or Julian Chival

Make checks payable to the Baltimore Chapter of ASPE. Please contact the Chapter Treasurer with any questions.

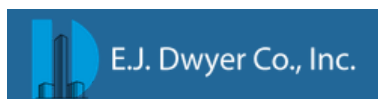
# MEETING SCHEDULE



| Meeting Date | Topic & Presenter                                                                                | Location      |
|--------------|--------------------------------------------------------------------------------------------------|---------------|
| Sep 23, 2026 | Plumbing Piping Codes & Standards Updates<br>Brian Conner, Charlotte Pipe                        | Little Havana |
| Oct 21, 2026 | Water Heater DOE Updates<br>Lauren Berenato, Bradford White                                      | Little Havana |
| Nov 18, 2026 | Vacuum Waste Systems<br>Hari Patel, McWane                                                       | Little Havana |
| Dec 16, 2026 | LEED v5 Plumbing Points: Water Efficiency & Innovation Topics<br>Aaron Rubin, Mueller Associates | Valley Inn    |
| Jan 20, 2027 | Industry Night                                                                                   | Local UA 486  |
| Feb 17, 2027 | Panel Discussion – Networking Through Your Career                                                | Little Havana |
| Mar 10, 2027 | Fire Protection 101                                                                              | Little Havana |
| Apr 14, 2027 | Artificial Intelligence in Plumbing Engineering<br>Tom Mitchell, Urban Engineers                 | Little Havana |
| May 19, 2027 | Design Development<br>Joe Niedzielski, 2RW                                                       | Little Havana |

# THANK YOU TO OUR 2026-2027 ANNUAL AFFILIATE SPONSORS

## STAINLESS STEEL SPONSORS



## COPPER SPONSORS



## BRASS SPONSORS



**S.E. Taylor  
& Associates**

**viega**



Julian Chival, PE, CPD, LEED AP BD+C  
Chapter President

Good greetings and happy October to all!

The biggest plumbing engineering event of the year is happening this month! In case you haven't heard, the 2026 ASPE Convention & Expo will be taking over Oklahoma City this October 8-14. The Expo is a one of a kind showcase of plumbing design products and services, and the rest of the convention packs even more: technical education sessions from national experts, nonstop networking with plumbing professionals, and likely more continuing education credits than you even need!

If you're reading this before October 8, it is *technically* not too late to register, but wow talk about last minute! Maybe just wait until the 2027 Tech Symposium in Minneapolis, or when we reconvene in 2028 for the next Convention in Louisville, KY. We'll let you know what you missed this year. And if you will be in OKC, I hope to see you!

Another important aspect of the Convention is the ASPE Business Meeting, where your delegates will vote on Society's future leadership, hear amendments to the bylaws, and help shape the direction ASPE continues to grow. For anyone who missed it in the September newsletter, your 2026 Baltimore Delegates are: myself, Justin Saelens, Chuck Swope, Abbie La Porta, Nikita Patel, and Mahallani Bandong. If this all sounds interesting to you, let me know and I'll figure out how we can support you as a delegate for 2028.

Now for some Baltimore news: If you won't be in OKC, the next time I'll see you is at our next chapter meeting on October 21 at Little Havana. I'm looking forward to another insightful presentation. I've heard the target audience for this one is anyone who likes hot water (and that includes me!). Come find me and the other delegates, I'm sure we'll all have plenty to share. We've also got an AYP event in the works. Our AYP Liaison Abbie is cooking up a candle making workshop and has shared a save the date banner. I've got my calendars marked and if you're under 35 I expect to see you there, no excuses!

I also need to give a huge thank you to all of our annual affiliate sponsors who have committed to supporting the Baltimore chapter this season. You all have blown me away with your support! I took a risk changing things up a bit during my first term as president, but this has been a great success so far.

Lastly, check out the research request on the next page that I received from John Lansing, a fellow ASPE member and the director of plumbing standards research and development for the Center for Building. Take a look and let John know if you've got any info to share!

Thanks,

Julian

# PLUMBING ENGINEERING RESEARCH REQUEST

The arial bombings during World War II left over half a million homes damaged or destroyed in Great Britain, launching the UK into a housing crisis. By November of 1940 over 25,000 residents in London had been displaced by the bombings. The UK government began identifying divisions within the AEC industry that needed research to further optimize materials during the war and speed up the process of reconstruction and plumbing was identified as a primary focus. It was considered important enough that drainage test rigs were constructed outside of the Houses of Parliament in 1941 to investigate the performance of drainage systems without any vent piping for fixture drains or branches, later known as the 'single stack'.

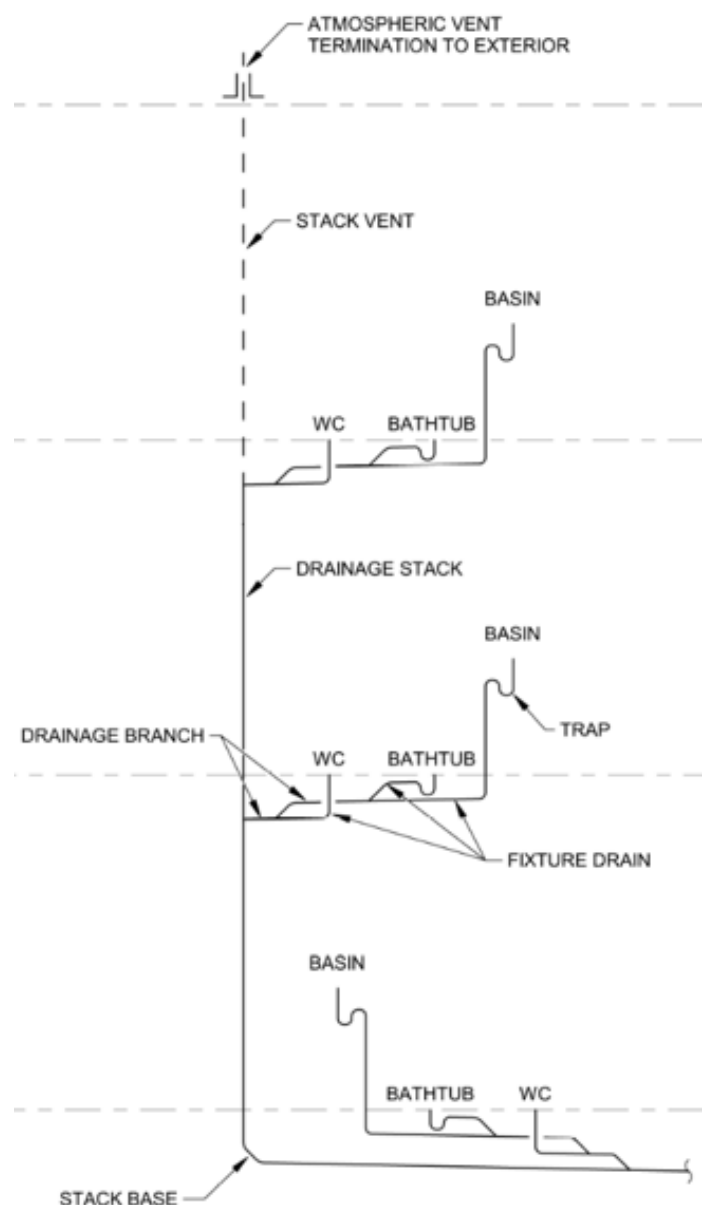
As WWII was ongoing, coordination with the European continent was limited to those residing in the UK. F. L. Barrow at the Building Research Station in the UK wrote to William Reed during the summer of 1942 at the National Housing Agency in the US, a precursor to the Department of Housing and Urban Development (HUD), sharing some details about the single stack used in Germany and Central Europe, highlighting the major cost advantages of the method. In the letter, Barrow also inquired about the use of the single stack in Baltimore, suggesting that it was common practice and requested details on sizing and design recommendations. Barrow assembled some documents on the single stack to share with Reed while visiting the American embassy in London later that year (1942). Reed never provided any details on Baltimore and this request remains a bit of a mystery. While this attempt to collaborate across the Atlantic could have proved beneficial, particularly had it been with the National Bureau of Standards, the BRS would be left to investigate this subject independently.

Was Barrow mistaken about the single stack in Baltimore or did was William Reed simply unable to find design details to send to the BRS in the UK?

**My Question for ASPE Baltimore: Are you aware of any single stack drainage configurations being used in Baltimore prior to 1940? What I mean by "single stack" is any stack that is permitted to receive unvented fixture drains or branches without any vent piping. The only vent in the entire system is the stack vent. This is permitted today in IPC Section 913 Waste Stack Vent and IPC Section 917 Single-Stack Vent System. These systems were very rare in the US prior to 1950 but were used in Philadelphia. Cleveland also allowed the single stack but required that special anti-siphon traps be used if the trap venting were to be omitted.**

Thank you all in advance,

John Lansing, CPD (ASPE Portland Chapter)  
Director of Plumbing Standards Research and Development  
Center for Building in North America  
[john.lansing@centerforbuilding.org](mailto:john.lansing@centerforbuilding.org)





### PVI INDUSTRIES: [www.pvi.com](http://www.pvi.com)

ASME Water Heaters for all energy sources. AquaPLEX Duplex stainless steel tank, semi-instantaneous, instantaneous, flexible fuels, condensing boilers, digital mixing valves.



### HUBBELL WATER HEATERS: [www.hubbellheaters.com](http://www.hubbellheaters.com)

ASME and Non-ASME water heaters. Electric, gas, steam and indirect. Cement lined tanks, hazardous locations, tepid water heating systems, RO/DI, heat pump water heating.



### LYNC: [www.lyncbywatts.com](http://www.lyncbywatts.com)

Engineered System Solutions; Commercial Heat Pump Water heating, Packaged Water Heating Systems, and Hot Water Wellness Solutions.



### AET ALTERNATE ENERGY TECHNOLOGIES: [www.aetsolar.com](http://www.aetsolar.com)

Solar Water Heating Systems, complete drainback systems, flat panel solar collectors, engineering support.



### AMTROL: [www.amtrol.com](http://www.amtrol.com)

ASME and non-ASME Expansion Tanks, Hydropneumatic Tanks, Storage Tanks, and Air Elimination Equipment



### LAWLER MANUFACTURING: [www.lawlervalue.com](http://www.lawlervalue.com)

Thermostatic Mixing Valves for Domestic Water; manifold recirculation stations, Emergency Mixing Valves, Combination Temperature and Pressure Valves, Photographic Control Valves, thermostatic and Digital Mixing valves.



### STINGRAY SYSTEMS: [www.tepid.com](http://www.tepid.com)

Emergency fixture and mixing valve solutions; eyewash, eye/face, shower only, combination stations, emergency mixing valves.



### THERMON MANUFACTURING: [www.thermon.com](http://www.thermon.com)

Freeze Protection for Pipes, Control and Monitoring Systems, Roof and Gutter Deicing, Snow Melting and Floor Warming Cables, Domestic Hot Water Temperature Maintenance.



### HEATIZON: [www.heatizon.com](http://www.heatizon.com)

Electric Snow Melting Systems, Electric Roof Deicing, Electric Slab Heating, Electric Radiant Floor Heating, Turn Key Electric Snow Melting Systems.



### FRIO: [www.frio.co](http://www.frio.co)

Next generation heat trace controllers using IoT connectivity, innovative sensing, and advanced control methods to provide 24/7 advanced monitoring with automatic fault notification.



### REIMERS: [www.reimersinc.com](http://www.reimersinc.com)

Electric steam boilers, electric hot water boilers, custom engineered skid packages, unvented blow off tanks, vented blowdown separators.



### TRICON FORCE PIPING SOLUTIONS: [www.tfpiping.com](http://www.tfpiping.com)

Pre-Fabricated, Pre-Insulated Piping Systems, Secondary Containment and Conduit Piping Systems for Industrial and Commercial Applications.



Please contact **Jason Eagles** – [Jason@bayassociates.com](mailto:Jason@bayassociates.com)

10943 McCormick Rd, Hunt Valley, MD 21031

PHONE 410-825-6616 | FAX 410-825-6618 | [www.bayassociates.com](http://www.bayassociates.com)



# Register **NOW!**



## EXPAND YOUR KNOWLEDGE AND NETWORK

- ➔ Explore the latest plumbing products, services, and design techniques
- ➔ Engage in technical education sessions designed to advance your career
- ➔ Solve challenges directly with technical experts on the show floor
- ➔ Connect with thousands of industry professionals
- ➔ Earn CEUs toward your certifications

**REGISTER AT [EXPO.ASPE.ORG](https://expo.aspe.org)**



**ASPE**  
Convention & Expo  
OKLAHOMA CITY | 2026



**CONVENTION** October 8-14  
**EXPO** October 12-13

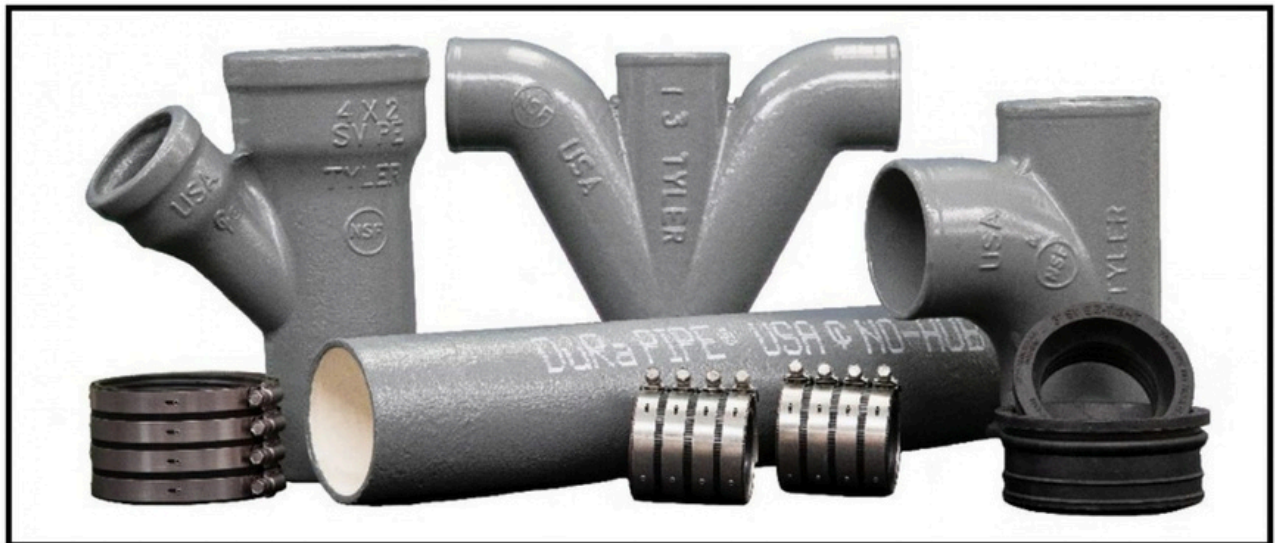


PIPE & COUPLING



anaco-husky

**SOURCED IN AMERICA. MADE IN AMERICA.**



**Patrick Leonard: (443)401-9695**  
**Patrick@4leafsales.com**

**Dave Jones: (443)834-4410**  
**Dave@4leafsales.com**



Chuck Swope, PE, CPD, LEED AP BD+C  
Treasurer & Past President

Greetings, ASPE faithful!

The checks keep rolling in, and our first meeting of the year was a rousing success! We were able to keep our costs in line with last year while still delivering the high-quality experience our members have come to expect. As always, I'm paying close attention to what attendees enjoy most as we plan future events. Based on our early data, the beef skewers are a runaway hit, while the seafood pasta may be headed back to the drawing board. Rest assured, not every buffet will turn into a Thunderdome-style free-for-all, especially if we want to avoid complete beef skewer domination. We'll continue working to provide a great variety of delicious options throughout the season so there's something for everyone.

On another positive note, our raffle was a tremendous success as well. The enthusiasm from our members was fantastic to see, and the strong participation generated more support than we anticipated. I'll be working with our esteemed president to determine the best way to reinvest those proceeds back into the chapter and continue enhancing the value we provide to our membership.

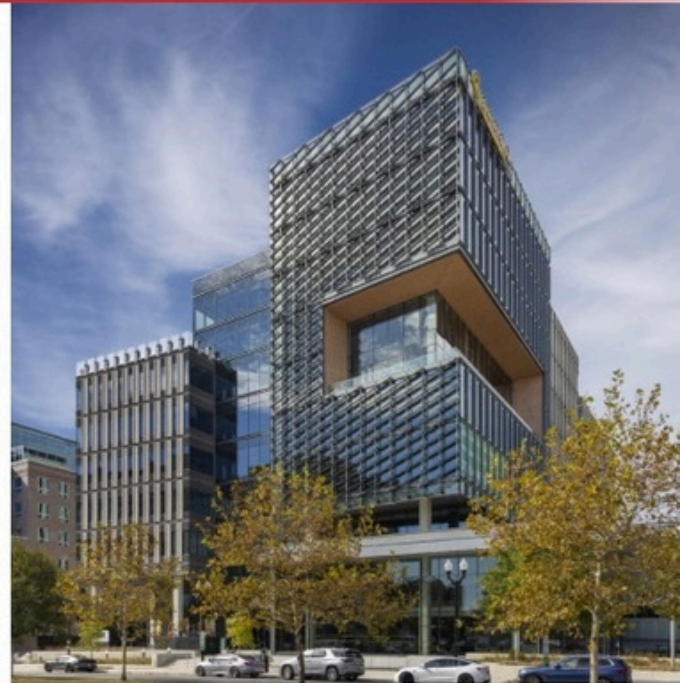
I'll keep my article relatively short this month and use the opportunity to extend a sincere thank you to our newest sponsors. Through the efforts of our distinguished president, we've welcomed additional support from Victaulic, Barnard Associates, MidAtlantic Rep South, and S.E. Taylor and Associates. Their contributions help make our programs, meetings, and chapter initiatives possible, and we're grateful to have them as partners.

Be sure to keep an eye on future newsletters, where we'll be highlighting each of these sponsors and sharing more about the products, services, and expertise they bring to our industry. We appreciate their support and look forward to showcasing their commitment to the Baltimore ASPE Chapter.

Chuck Swope, PE, CPD  
*Chapter Treasurer*  
*Board of Governors Chair*  
*Chapter Web Master*  
*Chapter Swag Beast*



# PROUD TO SUPPORT ASPE BALTIMORE



*For 60 years, Mueller Associates has delivered plumbing engineering designs that strengthens communities through health, sustainability, and innovation.*



**1966**  
**2026**  
YEARS

Mueller Associates  
1201 Winterson Road, Suite 300  
Linthicum, MD 21090  
[www.muellerassoc.com](http://www.muellerassoc.com)

**ENGINEERING GREAT EXPERIENCES**



Justin Saelens, LEED AP BD+C  
Vice President- Technical

## **Technical Report**

Thank you to everyone who came out to our September meeting to kick off the 2026-2027 ASPE season. For those of you who couldn't make it, I forgive you. Lucky for you, another opportunity to join us and spend a couple hours networking and learning about our ever-changing industry is just around the corner! On Wednesday, October 21<sup>st</sup>, we will be back at Little Havana for another exciting technical presentation. Lauren Berenato will be enlightening us on the latest and greatest updates to the DOE as related to commercial water heaters; specifically, updates regarding efficiency, venting, and retrofit design.

Lauren is a Senior Manager of Business Development at Bradford White, specializing in plumbing and mechanical engineering. Lauren is a member of the Philadelphia ASPE Chapter serving as their Vice President of Membership. Additionally, Lauren serves as the ASPE Regional 1 Affiliate Liaison. With over a decade of experience in the industry and many ASPE presentations under her belt (including seven at the national level) we will all be in very good hands.

A big shoutout and thank you to Brian Conner for the excellent and informative presentation on the role of codes, standards, and product listings as they relate to the success of a project, both during design and construction.

I look forward to seeing you all on October 21st, or maybe sooner if you will be attending the convention!

Justin

# Small Footprint City-Sized Output



**CUMMINS-WAGNER**

*100% Employee Owned*

LEARN MORE



**Something new is on the horizon.** With intelligent modulation and cascading capability, Regent Commercial Tankless water heater meets large fluctuating demands as found in multifamily buildings, hotels or universities without oversized systems or wasted energy. Because no one brings it all together like Lochinvar.



**Lochinvar®**  
HIGH EFFICIENCY BOILERS & WATER HEATERS

# Water System Strategies for Sterile Processing Success

Link to Article: [Water System Strategies for Sterile Processing Success | phcppros](#)

*Early planning, understanding staff workflows and coordinating with clients, architects and vendors are critical for sizing source equipment and meeting evolving standards.*

February 2, 2026

Aaron Bock, PE



The sterile processing department (SPD) is one of the most critically important areas of a hospital, as it provides tools and instruments for operating room procedures. Surgeries and other procedures in operating rooms are often the largest revenue generators for hospitals, and even short disruptions can cause huge financial losses. Worse, operating room delays affect patients needing immediate lifesaving treatment.

SPDs are also among the most challenging for plumbing engineers, particularly water systems. SPDs contain many different plumbing systems on their own, but they also contain complex equipment with strict requirements around water temperatures, pressures and purity that are unforgiving if designed incorrectly. Given their critical role, SPD plumbing systems must be designed with precision, redundancy and resiliency.

## **Staff, spaces and workflows**

As with many other hospital and healthcare spaces, it helps to understand how SPD staff work and the environment they work in. While it's not required to have a healthcare degree to work in an SPD, those who do are still highly trained in surgical equipment and instruments, sterilization techniques, working in hazardous conditions and infection control.

They are often required to obtain Certified Registered Central Service Technician certification, which involves 400 hours of hands-on experience and passing a 150-question exam. All this training prepares them to work in conditions and with materials that are unsafe to the public while keeping patient safety and infection control at the forefront.

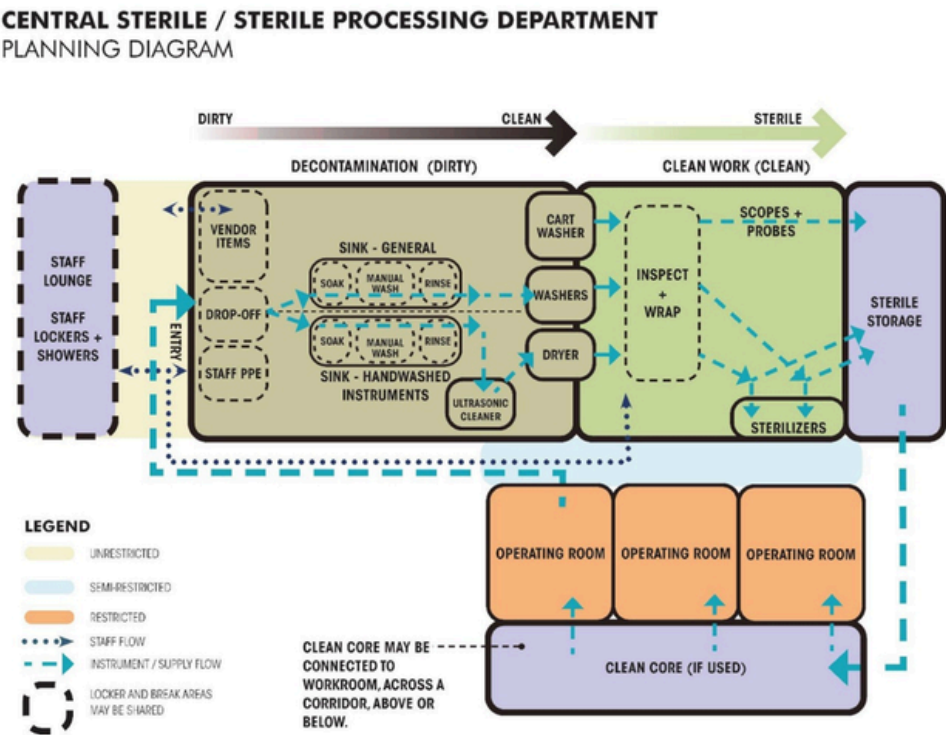
SPDs include several work areas, but past naming conventions were inconsistent. For example, the area for unloading sterilizers and packing instruments was once called the clean area, preparation area or prep and pack. Today, healthcare code bodies such as the Facility Guidelines Institute (FGI) standardize these titles to reduce confusion among design and healthcare professionals (see Figure 1).

| Current Terms                                                                   | Uniform Titles                    |
|---------------------------------------------------------------------------------|-----------------------------------|
| Decontamination area/dirty room                                                 | Decontamination Room              |
| Clean area/Preparation area/Prep and packaging/Sterilizer loading and unloading | Clean workroom                    |
| Sterilizer access                                                               | Sterilizer equipment access room  |
| Storage/clean storage/sterile storage                                           | Sterile storage room              |
| Substerile room/OR sterile processing                                           | Satellite sterile processing room |
| Housekeeping                                                                    | Environmental services room       |
| GI endoscopy procedure room                                                     | Endoscopy procedure room          |
| GI endoscope cleaning room                                                      | Endoscope processing room         |



When architects plan SPD layouts, they consider required work areas and staff workflows, usually driven by healthcare codes such as FGI. Most importantly, codes mandate one-way workflow — dirty instruments move to clean and then sterile states without crossing paths, minimizing infection control risks.

After surgeries, instruments arrive at the SPD and are dropped off in the decontamination (dirty) area, where they are first cleaned by hand in processing sinks. Afterward, the more resilient instruments are placed in mechanical washers that clean them further, but do not sterilize them (see Figure 2).



More delicate instruments, such as imaging probes, endoscopes and others with internal electronics, are sensitive to high water temperatures and aggressive sanitizers and cannot be cleaned in washers like other equipment. Instead, these instruments are cleaned in ultrasonic cleaners that do not damage them, then placed in dryers.

After instruments are cleaned in the decontamination area, they are moved to the clean workroom. These two areas are separated by a sealed barrier for infection control.

Instruments move between them through pass-throughs in the barrier that are often integral to the washers and dryers — they enter the equipment in the decontamination area on one side and then exit into the clean area on the other.

In the clean area, the resilient instruments are inspected and then wrapped in packaging designed for sterilization. They are then put into machines that use steam and vacuum to sterilize them and then put into storage for use in surgeries. Less resilient instruments that cannot withstand steam sterilization may be inspected and stored, or they may be sterilized with chemicals.

All SPD cleaning and sterilization processes require specialized equipment with strict water and other plumbing system requirements. It is critical to read the equipment cutsheets and specifications so you understand them (see Figure 3).

| Released                              |                                                                |                                                                                                                                                                                                                                                  |   |                                                                                                                                                                                                                                                                                                                                                                                     |
|---------------------------------------|----------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| UTILITY REQUIREMENTS CHART (PLUMBING) |                                                                |                                                                                                                                                                                                                                                  |   |                                                                                                                                                                                                                                                                                                                                                                                     |
| UTILITY                               | PARAMETER                                                      | REQUIREMENT                                                                                                                                                                                                                                      | ✓ | NOTES                                                                                                                                                                                                                                                                                                                                                                               |
| HOT WATER (HW)                        | CONNECTION SIZE / TYPE                                         | 1/2 in / FEMALE NPT<br>[1/2 in / MALE BSPT]                                                                                                                                                                                                      |   | 1. STERIS REQUIRES TO INSTALL WATER HAMMER ARRESTOR, UNION & PRESSURE GAUGE.                                                                                                                                                                                                                                                                                                        |
|                                       | PRESSURE RANGE                                                 | 15 - 50 psig DYNAMIC<br>[103-345 kPa]<br>MAX. 90 psig STATIC [620 kPa]                                                                                                                                                                           |   | 2. CUSTOMER MUST PROVIDE UTILITY CONNECTIONS WITH SHUTOFFS DISCONNECTS WITHIN 2 FEET OF THE PERIMETER OF THE EQUIPMENT AND BELOW THE CEILING DECK.<br>*STERIS OFFERS FLEXIBLE HOSES ACCESSORY (FD088 OR FD037) WITH INSTRUCTIONS.                                                                                                                                                   |
|                                       | OPERATING FLOW RATE                                            | 6.8 US GPM [25.7 L/min] TO<br>14.1 US GPM [53.4 L/min]                                                                                                                                                                                           |   |                                                                                                                                                                                                                                                                                                                                                                                     |
|                                       | TOTAL CONSUMPTION PER INSTRUMENT CYCLE<br>*(NOTE 4)            | 10.5 US GAL [39.8 L]<br>WITH ACU-WASH RESERVOIR:<br>7.0 US GAL [26.5 L]                                                                                                                                                                          |   | 3. SAMPLING VALVES INSTALLATION AS CLOSE AS POSSIBLE TO WASHER WATER CONNECTIONS IS RECOMMENDED.                                                                                                                                                                                                                                                                                    |
|                                       | TEMPERATURE RANGE                                              | 110 °F [43 °C] TO 150 °F [65.5 °C]                                                                                                                                                                                                               |   |                                                                                                                                                                                                                                                                                                                                                                                     |
|                                       | WATER QUALITY *(NOTE 5)                                        | HARDNESS (CaCO <sub>3</sub> ) : 50-80 ppm<br>(MAX. 120 ppm)                                                                                                                                                                                      |   |                                                                                                                                                                                                                                                                                                                                                                                     |
| COLD WATER (CW)<br>*(NOTES 6)         | CONNECTION SIZE / TYPE                                         | 1/2 in / FEMALE NPT<br>[1/2 in / MALE BSPT]                                                                                                                                                                                                      |   | 4. CONSUMPTION BASED ON INSTRUMENT CYCLE WITH PROLYSTICA ULTRA CONCENTRATE HIGH PERFORMANCE CHEMICALS (PUC HP) WITH THE FOLLOWING UTILITY CONDITIONS:<br><br>THREE-LEVEL MANIFOLD RACK (CW) COLD WATER PRESSURE: 30 psig DYNAMIC [207 kPa]<br>(CW) COLD WATER TEMPERATURE: 70 °F [21 °C]<br>(HW) HOT WATER TEMPERATURE: 150 °F [65 °C]<br>(PW) PURE WATER TEMPERATURE 70 °F [21 °C] |
|                                       | PRESSURE RANGE                                                 | 30 - 50 psig DYNAMIC<br>[206-345 kPa]<br>MAX. 90 psig STATIC [620 kPa]                                                                                                                                                                           |   |                                                                                                                                                                                                                                                                                                                                                                                     |
|                                       | OPERATING FLOW RATE                                            | 10.7 US GPM [40.5 L/min] TO<br>14.1 US GPM [53.4 L/min]                                                                                                                                                                                          |   |                                                                                                                                                                                                                                                                                                                                                                                     |
|                                       | TOTAL CONSUMPTION PER INSTRUMENT CYCLE<br>*(NOTE 4)            | FOR SUMP FILLING: 11.1 US GAL [42.0 L]<br>(ADD THE FOLLOWING CONSUMPTION FOR OPTIONS/CONFIGURATIONS)<br><br>NON-VENTED SYSTEM:<br>20.7 US GAL [78.4 L]<br>DRAIN COOLDOWN:<br>14.5 US GAL [54.9 L]<br>DRAIN ACU-COOLDOWN:<br>10.9 US GAL [41.3 L] |   | UTENSIL CYCLE CONSUMPTION:<br>TWO-LEVEL MANIFOLD RACK<br>CW: 11.0 US GAL [41.6 L]<br>HW: 10.2 US GAL [38.6 L]<br>PW: 6.8 US GAL [25.7 L]                                                                                                                                                                                                                                            |
|                                       | TEMPERATURE RANGE                                              | 70 °F [21 °C] MAXIMUM                                                                                                                                                                                                                            |   | 5. STERIS RECOMMENDS THE FOLLOWING WATER QUALITY PARAMETERS:<br>TOTAL DISSOLVED SOLIDS: 100-200 ppm<br>(MAX. 500 ppm)<br>TOTAL ALKALINITY (CaCO <sub>3</sub> ) : 70-120 ppm<br>(MAX. 180 ppm)<br>pH : 6.8-7 (MAX. 7.5)<br>TOTAL SILICA : 0.1-0.5 ppm (MAX. 1 ppm)                                                                                                                   |
|                                       | WATER QUALITY *(NOTE 5)                                        | HARDNESS (CaCO <sub>3</sub> ) : 50-80 ppm<br>(MAX. 120 ppm)                                                                                                                                                                                      |   |                                                                                                                                                                                                                                                                                                                                                                                     |
| PURE WATER (PW)                       | CONNECTION SIZE / TYPE                                         | 1/2 in / FEMALE NPT<br>[1/2 in / MALE BSPT]                                                                                                                                                                                                      |   | 6. BACK FLOW PREVENTER AGAINST BACK SIPHONAGE MAY BE REQUIRED (LOCAL PLUMBING CODE)                                                                                                                                                                                                                                                                                                 |
|                                       | PRESSURE RANGE                                                 | 5 - 30 psig DYNAMIC [30 - 206 kPa]<br>MAX. 90 psig STATIC [620 kPa]                                                                                                                                                                              |   | 7. PW IS OPTIONAL. IF UNAVAILABLE, UNIT WILL PROCESS THERMAL RINSE USING HOT WATER SUPPLY.                                                                                                                                                                                                                                                                                          |
|                                       | OPERATING FLOW RATE                                            | 5.5 US GPM [21 L/min] TO<br>12.6 US GPM [48 L/min]                                                                                                                                                                                               |   |                                                                                                                                                                                                                                                                                                                                                                                     |
|                                       | TOTAL CONSUMPTION PER INSTRUMENT CYCLE<br>*(NOTE 4 AND NOTE 7) | 7.0 US GAL [26.5 L]                                                                                                                                                                                                                              |   |                                                                                                                                                                                                                                                                                                                                                                                     |
|                                       | TEMPERATURE RANGE                                              | 70 °F [21.1 °C] TO 150 °F [65.5 °C]                                                                                                                                                                                                              |   |                                                                                                                                                                                                                                                                                                                                                                                     |
|                                       | RESISTIVITY (CONDUCTIVITY)                                     | 0.1-0.5 MΩ <sub>2</sub> -cm<br>(2-10 µS/cm)                                                                                                                                                                                                      |   |                                                                                                                                                                                                                                                                                                                                                                                     |
|                                       | pH                                                             | 6.8 - 7.5                                                                                                                                                                                                                                        |   |                                                                                                                                                                                                                                                                                                                                                                                     |

Since the SPD equipment requirements can be challenging for plumbing systems, you need to plan early and thoroughly. Push your clients and architects to get you equipment information as early as possible, even if it is only preliminary. This helps identify needed systems, source equipment, backflow prevention and other piping accessories.

## **Backflow prevention**

Planning for backflow prevention is often one of the most challenging aspects of designing plumbing systems for SPDs. You can expect to need a reduced-pressure zone (ASSE 1013-type) backflow preventer for nearly every piece of equipment with a water connection. Backflow preventers occupy significant wall space, require access for routine maintenance and testing, and quickly add cost.

How you incorporate backflow preventers into your design depends on code requirements and client preferences; you should consult both before developing a strategy. Many plumbing codes allow one backflow preventer per water system to isolate the entire SPD area. However, some states (such as Wisconsin) require each piece of equipment to be isolated from the rest, meaning that you need one backflow preventer per system per piece of equipment.

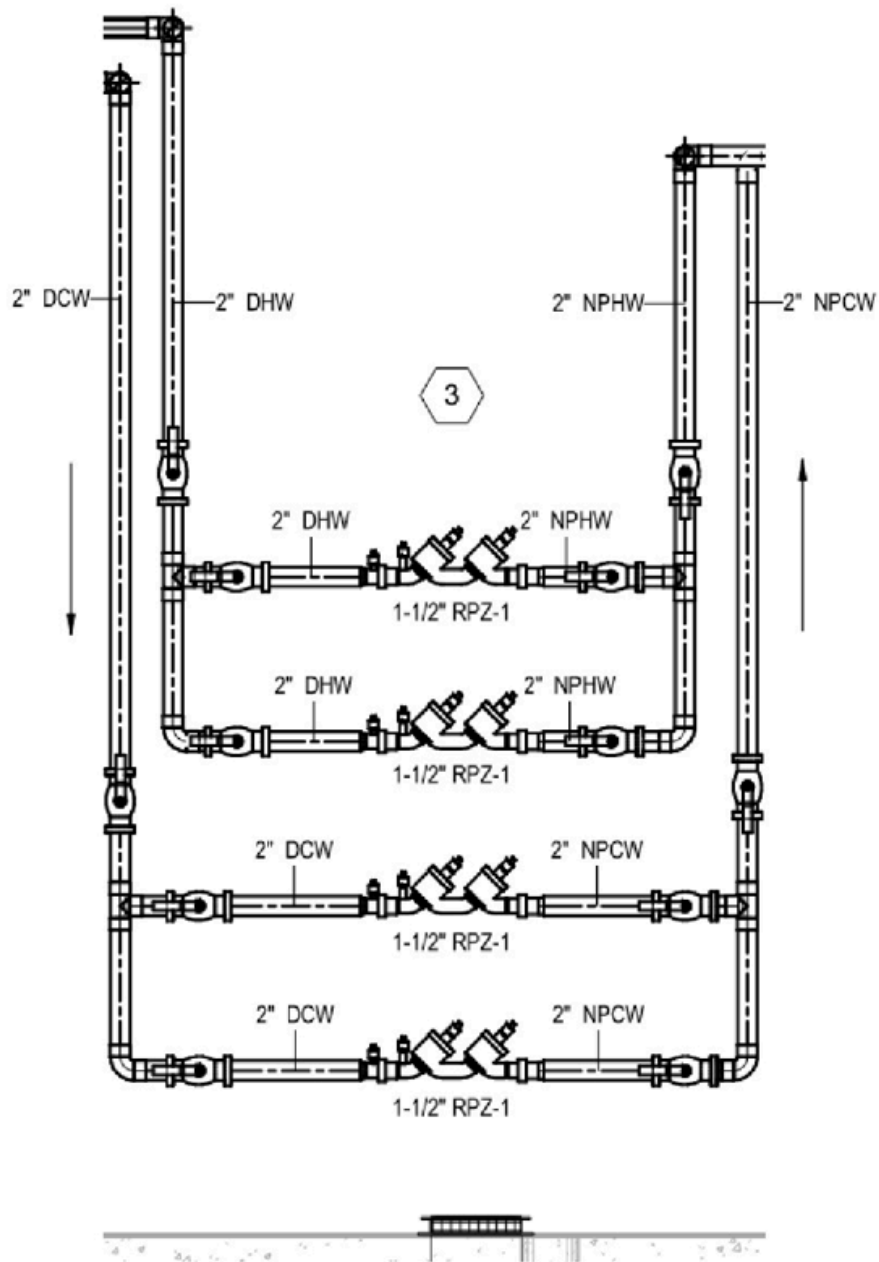
Your clients may also have opinions about backflow prevention strategies, as each one carries yearly maintenance and testing requirements, which add to operating budgets. Additionally, backflow preventers eventually fail and need replacement, running the risk of shutting down a piece of equipment or an entire area, depending on how you arrange them. Early in the design process, ask your clients about their risk tolerance for equipment or area shutdowns — this will guide your design.

Most clients consider a complete shutdown of the SPD unacceptable. Therefore, I always recommend some level of redundancy in SPD systems so that no single point of failure can shut down the entire department. When the codes mandate that each piece of equipment be isolated from the rest, some redundancy is already built in, as one backflow preventer failure only shuts down one unit.

Most clients I've worked with have been accepting of this. If codes do not require individual isolation, then a more cost- and maintenance-effective solution is to isolate each water system entering the SPD space with backflow preventers in parallel. This way, one parallel unit can keep the department running if the other unit fails.

Locating backflow preventers is usually more challenging than choosing an arrangement. Healthcare codes rarely allow backflow preventers and other plumbing system accessories in clean and sterile spaces. While placing them in decontamination areas may be allowed, it is often problematic due to limited wall space. Backflow preventers are best located in nearby back-of-house spaces where testing and maintenance can be done outside the SPD.

It's also best to have this space very near the equipment it serves, as equipment often has strict temperature requirements and triggers alarms when these are not met. When these spaces are located nearby, it is not usually necessary to run circulated hot water into the SPD space. While equipment may have strict temperature requirements, most units are also programmed with flush cycles that allow uncirculated water to reach the required temperature (see Figures 4 and 5).



Flush cycle durations and flows are often detailed in the equipment information, which can be used to determine how far to run an uncirculated branch without triggering an alarm. Furthermore, while you should understand an SPD's workflows and operating hours before designing it, most run continuously enough that uncirculated hot water has little chance to cool. Even in ambulatory surgery centers that only perform elective procedures, it is not uncommon for SPDs to run constantly for 20 hours a day.

## Water temperatures and pressures

To address waterborne pathogen and infection control concerns, some healthcare codes require that hot water be delivered to an SPD at 140 F. Absent any code requirements, good design practice is to keep hot water temperatures above 125 F, as cooler water promotes Legionella and other waterborne pathogen growth. Most decontamination and sterilization equipment prefers these higher temperatures, reducing strain on integral booster heaters.

Equipment and fixtures needing lower temperatures, such as endoscope cleaners and hand sinks, can be equipped with thermostatic mixing valves to temper hot water. Hand sinks should meet the temperature requirements of the respective plumbing code (105 F is common), but decontamination and processing sinks can be kept at the system temperature. Higher water temperatures are often better for manual instrument washing; SPD staff are trained to deal with them.

Different pieces of equipment may also require varying water pressures. Building water pressure is sometimes adequate for the range the equipment can tolerate, but in other cases, you will have to equip the supplies with pressure-reducing valves. Faucets and water guns on processing sinks, particularly, may want lower pressures to prevent overspray and spread of waterborne pathogens.

## Water purity

SPDs have followed several different water quality standards (though not requirements) in the past. The newest standard gaining traction in healthcare is the 2023 version of ANSI/AAMI ST108 — Water for the Processing of Medical Devices. While this standard is not yet a code requirement, many engineers in the industry expect it to become one at some point and design for it regardless.

ST108 has three classifications for water purity used in SPDs, each with a different application (see Figure 6). The first, utility water, is used for manual washing and rinsing in processing sinks. Most untreated tap water will meet the quality requirements for utility water, but it's still important to confirm this with a sample analysis.

| Water Quality Measurement  | Units                   | Utility Water<br>(flushing, washing, rinsing) | Critical Water<br>(final rinse, steam generation) | Steam<br>(sterilization)      |
|----------------------------|-------------------------|-----------------------------------------------|---------------------------------------------------|-------------------------------|
| pH @ 25° C                 | pH                      | 6.5 - 9.5                                     | 5.0 - 7.5                                         | 5.0 - 9.2                     |
| Total Alkalinity           | mg CaCO <sub>3</sub> /L | < 400                                         | < 8                                               | < 8                           |
| Bacteria                   | CFU/ml                  | <500                                          | <10                                               | N/A                           |
| Endotoxin                  | EU/ml                   | N/A                                           | <10                                               | N/A                           |
| Total Organic Carbon (TOC) | mg/L (ppm)              | N/A                                           | <1.0                                              | N/A                           |
| Color/Turbidity            | Visual                  | Colorless, clear, no sediment                 | Colorless, clear, no sediment                     | Colorless, clear, no sediment |
| <b>IONIC CONTAMINANTS</b>  |                         |                                               |                                                   |                               |
| Aluminum                   | mg/L (ppm)              | <0.1                                          | <0.1                                              | <0.1                          |
| Chloride                   | mg/L (ppm)              | <250                                          | <1                                                | <1                            |
| Conductivity               | µS/cm                   | <500                                          | <10 (0.1 megohm resistivity)                      | <10 (0.1 megohm resistivity)  |
| Copper                     | mg/L (ppm)              | <0.1                                          | <0.1                                              | <0.1                          |
| Iron                       | mg/L (ppm)              | <0.1                                          | <0.1                                              | <0.1                          |
| Manganese                  | mg/L (ppm)              | <0.1                                          | <0.1                                              | <0.1                          |
| Nitrate                    | mg/L (ppm)              | <10                                           | <1                                                | <1                            |
| Phosphate                  | mg/L (ppm)              | <5                                            | <1                                                | <1                            |
| Sulfate                    | mg/L (ppm)              | <150                                          | <1                                                | <1                            |
| Silicate                   | mg/L (ppm)              | <50                                           | <1                                                | <1                            |
| Total Hardness             | mg/L (ppm)              | <150                                          | <1                                                | <1                            |
| Zinc                       | mg/L (ppm)              | <0.1                                          | <0.1                                              | <0.1                          |

Source: AAMI Standard ST108

Critical water is for use with instrument washers and sterilizers and has more stringent quality requirements. If sterilizers have their own internal steam generators, this water can also be used to feed them. If house steam will be used for sterilization instead, that water must meet the steam category requirements.

While house steam can be used for sterilization if the building has it, it's not always preferred. Steam systems are often expensive, difficult to design and maintenance-heavy, so most mechanical engineers I've worked with prefer to avoid them. Therefore, it's often easier and less risky to equip sterilizers with their own steam generators. Provided that building steam isn't used, water delivered to the SPD only needs to meet critical water requirements, and this can be used for all equipment in the space.

While the ST108 standard provides guidelines for water quality in different SPD applications, it is not a substitute for understanding equipment manufacturer requirements. Some equipment may have higher water quality requirements than those in the standard; if so, those should govern your design.

### **Source equipment**

Understanding SPD equipment requirements is critical, but sizing source equipment requires more data from facility operators and SPD staff. Determining the SPD water load on water heaters and water purification equipment is key to sizing both, and understanding how an SPD will operate is key to calculating this. At a minimum, you should have your client provide the following information:

- Anticipated average and peak operating room caseload per day;
- Number of hours per day that the SPD will operate, and when in the day these hours are;
- Anytime of day when there are anticipated surges in operating room procedures.

This information, combined with water usage and cycle time data from the SPD equipment, is all used to calculate water loads. Plumbing engineers can use this to size water heating equipment, but water purification equipment is usually selected by a vendor. When working with a vendor, provide them with all this information, along with all SPD equipment cutsheets and specifications and have them determine what water purification equipment is needed.

Sterile processing departments are often the most challenging areas of a hospital to design plumbing systems for. Even seasoned engineers must carefully plan for them. Early planning, detailed equipment information, equipment research and coordination with clients, staff, architects and vendors are all critical. Hospitals rely on functioning, resilient SPDs to keep revenue streams intact. Engineers involved in them need to keep this in mind during design and treat them with the care they deserve.



# E.J. Dwyer Company

10910 Pump House Road • Annapolis Junction, MD 20701

1970-2026 • 56 Years of Fast-Friendly-Professional Service



Kathy Dwyer



443-250-0285



kdwyer@ejdwyer.com



## American Gas Safety

[americangassafety.com](http://americangassafety.com)

Laboratory, kitchen, CO2, gas detector, UL approved valves and enclosures. Emergency off button with solenoid valves for both water and gas. Complete utility control for water. Merlin digital controllers. ✓



## Aquarius Products

[aquariusproducts.com](http://aquariusproducts.com)

Residential and Commercial. Acrylic and gel-coat ADA compliant showers. Barrier free shower pans plus collapsable water retainers.



## AutoHot

[aquariusproducts.com](http://aquariusproducts.com)

Advance domestic hot water (DHW) recirculation control and energy management systems to maximize water heating distribution efficiency while notifying you when your energy is being wasted or service is needed. ✓



## Bradley Corp.

[bradleycorp.com](http://bradleycorp.com)

Washfountains, lavatory centers, Halo emergency fixtures, mixing valves. Natural quartz Evero, Verge, Advocate, Omni Deck, Washbar. Washroom accessories and repair parts. ✓



## Chicago Faucets

[chicagofaucets.com](http://chicagofaucets.com)

Faucets built to last for commercial applications. Sensor, metering and manual faucets. No-lead laws met with E-Cast products. Food service for your kitchen and restaurant needs. Full lines of wall, and deck mount styles with pre-rinse, glass and pot fillers. ✓



## Chronomite Heaters

[chronomite.com](http://chronomite.com)

Electric tankless hot water heaters from 0.2gpm to high capacity. Instant-micro and insta-temp digital mixers for multiple applications. Omni flow controls to achieve efficient temp rise. ✓



## Circuit Solver

[circuitsolver.com](http://circuitsolver.com)

Self-actuating thermostatic balancing valves ranging from 1/2" to 2" with configurations. From ball valves, integrated unions, check valves, strainers thermometers, to ProPress ends. Eliminate time consuming balancing procedures like no other. ✓



## Comfort Designs

[comfortdesignsbathware.com](http://comfortdesignsbathware.com)

Non-code accessible, ANSI Type B, ADA compliant shower bases and enclosures. Single and multi-piece units with options in Acrylic, AcrylX or Solid Surface material. ADA shower accessories and features including trench drain with zero threshold. ✓



## Filtrine Water

[filtrine.com](http://filtrine.com)

Drinking water products traditionally of the highest quality craftsmanship. Custom engineered industrial chillers, drinking fountains, and water purification systems for a wide variety of applications focusing on sustainability and durability.



## MPL | IMI

[mplcompany.net](http://mplcompany.net)

Cultured marble wall panels, tub and shower surrounds in standard or custom sizes. The MPL shower surround system is incredibly durable, easy to install and maintain.



## Omni Flow Controls

[omniflowcontrols.com](http://omniflowcontrols.com)

Patented 0.5, 1.0, 1.5 GPM showerheads, aerators. LEED low flow! Pressure compensating laminar non-aerated outlets. ✓



## Rinnai Commercial

[rinnai.us/commercial](http://rinnai.us/commercial)

Commercial hydronic boiler RCB, commercial water heater boiler line RCW and commercial electric tank water heater RCET with all accessories. ✓



## ThermOmegaTech

[thermomegatech.com](http://thermomegatech.com)

Self-actuating thermostatic temperature control valves and actuators designed to cover, freeze protection, scald protection, drain tempering, tepid water delivery, and many other applications where ambient, fluid, or surface temperatures affect a system. ✓

✓ = Stocked



240-553-0112



[www.ejdwyer.com](http://www.ejdwyer.com)



[customerservice@ejdwyer.com](mailto:customerservice@ejdwyer.com)



Buy American Act compliant products available across all brands.  
Contact E.J. Dwyer Co. for project-specific compliance information.



Nicole Murphy  
Vice President- Membership  
Nicole Murphy

## Membership Report

### **Hello Baltimore Chapter!**

Please join us in welcoming our newest members to the Baltimore Chapter!

- Samantha Givans
- Michael Kowalski, P.E.
- John Carney
- Joshua Sizemore
- David Goldrick
- Shawn Marshall

We're delighted to have you as part of our community. A warm welcome to all of you! We look forward to seeing you at our next gathering. Welcoming new members is always a positive sign of growth for our Chapter. Your ideas and feedback are invaluable, please don't hesitate to share suggestions for increasing participation with any board member.

Not a member yet? Now's the perfect time to join and enjoy these benefits!

Learn more or join here: <https://aspe.org/join>

Let's keep building our community and growing together this year. We look forward to seeing you soon!

## Affiliate Report

**Dear Fellow Affiliates,**

**As I have stepped down from my responsibilities as your treasurer, I am happy to let you know I am the Chapter Affiliate Liaison for the Baltimore chapter. What exactly does my role entail? I will be your conduit for communication between you as Chapter Affiliates and the Board of Directors for our wonderful Baltimore chapter. That being said I invite you to come talk to me should you have any issues, concerns but best of all compliments for the chapter. Thanks again. I will see you at the next meeting in October.**



**Kathleen Dwyer-Stephens  
Affiliate Liaison  
EJ Dwyer Company, Inc.**

Manufacturers Representative Since 1968

# Harry Eklof

Representing: & Associates, Inc.

**CALEFFI**  
Hydronic Solutions



**FIELD CONTROLS**



**navien**



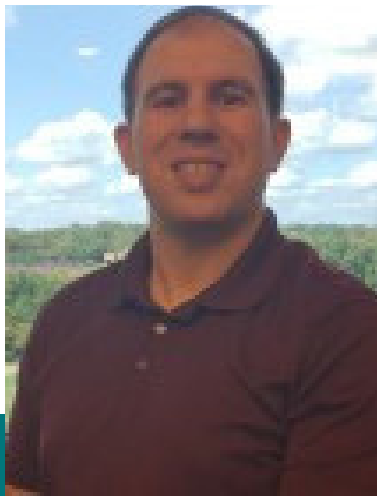
**FLORESTONE**  
A spec above.



**SCAN THE QR-CODE**

to get more information  
on product and training!





Chris Imhof, PE, CPD  
Vice President– Legislative

## **Legislative Report**

### **Release of the 2027 International Code Council Codes**

The 2027 editions of the ICC are beginning to be released. As of October 1, 2026, the following codes are available,

- 2027 International Plumbing Code (IPC)
- 2027 International Fuel Gas Code (IFGC)
- 2027 International Mechanical Code (IMC)

Codes can be viewed here:

<https://codes.iccsafe.org/codes/i-codes/2027-icodes>

### **ICC and IAPMO: Proposed Changes for the Development of Model Plumbing and Mechanical Codes**

PHCP Pros has provided an excellent summary of code development process for the 2030 ICC Codes (including the IPC, IFGC, and IMC) and 2030 IAPMO Codes (including Uniform Plumbing Code and Uniform Mechanical Code).

Proposals for the new ICC Codes can be submitted at <https://www.cdpassess.com/>. The deadline for proposals is January 12, 2027.

Proposals for the new IAPMO Codes can be submitted at the Portal at <https://bit.ly/4iy3ad9>. The deadline for proposals is 5 p.m. PDT on January 8, 2027.

The article from PHCP Pros can be found here: <https://www.phcppros.com/articles/24118-code-changes-due-for-the-2030-model-plumbing-and-mechanical-codes>

Chris Imhof, PE, CPD  
Vice President – Legislative



**PLUMBING**  
TECHNICAL SERVICES



**NOTHING PROTECTS LIKE GRAY**



Hari Patel  
Regional Manager  
Technical Services  
570.899.9413  
[hari.patel@mcwanepbgrp.com](mailto:hari.patel@mcwanepbgrp.com)



## AYP Update

*Save the date:*



# CANDLE-MAKING

*November 12th, 6:30 pm*

*TENTATIVE - more info coming soon!*



# Highland Tank®

Unmatched Quality and Service



Grease Interceptors



Water Tanks & Systems



Oil/Water Separators



ASME Pressure Vessels



[www.highlandtank.com](http://www.highlandtank.com)



814-893-5701

CONTACT

Chas Tevis



[ctevis@highlandtank.com](mailto:ctevis@highlandtank.com)



814-360-0101

# Hey Young Professionals!

**REGION 1 AYP PRESENTS:**



## **Relationship Building and Effective Leadership in the A/E/C Industry**

**NOVEMBER 19 - 12-1PM EST**

**THE MOST COMPLEX SYSTEM ON ANY  
PROJECT IS NOT MECHANICAL, ELECTRICAL,  
OR STRUCTURAL. IT IS THE PEOPLE.**

**IN THIS SESSION, ROBERT "BJ" ALLEN USES  
THE IDEA OF COMMUNICATION AS  
INFRASTRUCTURE TO SHOW HOW  
INTENTIONAL COMMUNICATION BUILDS  
TRUST, STRENGTHENS RELATIONSHIPS, AND  
HELPS TEAMS WORK THROUGH DIFFICULT  
SITUATIONS. ATTENDEES WILL GAIN  
PRACTICAL PHRASES AND TOOLS THEY CAN  
BEGIN USING IMMEDIATELY.**

**CAMERA-ON ATTENDANCE IS SUGGESTED  
AND PREFERRED.**

**REGISTER**

**THIS WEBINAR IS FREE TO ASPE MEMBERS.  
SIGN UP VIA 'REGISTER' BUTTON**

**A LINK WILL BE SENT OUT 1 DAY PRIOR  
MUST PROVIDE ASPE PID # FOR CEU**

**BJ BRINGS MORE THAN 33 YEARS OF  
ENGINEERING EXPERIENCE IN THE  
ARCHITECTURE, ENGINEERING, AND  
CONSTRUCTION (AEC) ARENA,  
EXCELLING IN VARIOUS ROLES. HE IS  
RECOGNIZED AS A STRONG LEADER,  
COMMUNICATOR, PARTNER, AND  
PROFESSIONAL ENGINEER. HIS  
CAREER HAS BEEN PRIMARILY  
FOCUSED ON HEALTHCARE DESIGN.  
INSPIRED BY HIS EXPERIENCE AS A  
HUSBAND OF A BREAST CANCER  
SURVIVOR AND FATHER OF TWO  
NICU PREEMIES, BJ IS PASSIONATE  
ABOUT ENHANCING THE  
ENVIRONMENT FOR PATIENTS AND  
STAFF IN HEALTHCARE  
ENVIRONMENTS THROUGH  
INNOVATIVE DESIGN OF BUILDING  
SYSTEMS. HIS PASSION FOR  
LEADERSHIP AND THE DEVELOPMENT  
OF STRONG RELATIONSHIPS DRIVES  
HIM TO REMOVE OBSTACLES FOR HIS  
TEAMMATES AND CLIENTS BY  
UNDERSTANDING THEIR WORK AND  
ANTICIPATING THEIR NEEDS, WHICH  
FUELS HIS CONTRIBUTIONS TO THE  
SUCCESS OF HIS PROJECTS AND THE  
PEOPLE AROUND HIM.**



*Proudly Representing Leading  
Plumbing and HVAC Manufacturers  
in the Mid-Atlantic Region Since 1982*

## MEET OUR SPECIFICATIONS TEAM



**Cydney Johnstone**  
Southern Virginia  
[cydney@thejoyceagency.com](mailto:cydney@thejoyceagency.com)



**Tyler Simms**  
Maryland  
[tyler@thejoyceagency.com](mailto:tyler@thejoyceagency.com)



**Michelle Stilley**  
DC Metro  
[michelle@thejoyceagency.com](mailto:michelle@thejoyceagency.com)



**Troy Monteith**  
Specifications Manager  
[tmonteith@thejoyceagency.com](mailto:tmonteith@thejoyceagency.com)

## MANUFACTURERS WE REPRESENT





**NEU·ION**  
HIGH PURITY WATER SYSTEMS

PURE SERVICE.  
PURE WATER SOLUTIONS.

# HIGH PURITY WATER SOLUTIONS

FROM DESIGN THROUGH SERVICE

A trusted water treatment partner  
for plumbing engineers and  
facility professionals.



**LET'S TALK HIGH PURITY WATER.**  
Partner with Neu-Ion on your next project.

[neu-ion.com](http://neu-ion.com)

[sales@neu-ion.com](mailto:sales@neu-ion.com)



Sepideh McQuay  
Education Committee Chair

Hello everyone,

I'm truly honored to take on the role of Chair of Education for our chapter, and I want to thank all of you for your trust in me. My journey in the industry began in 2005 outside of the United States, but my passion for construction and design has deepened significantly since I first ventured into plumbing design field in 2014, armed with an architecture degree and an associate degree in Drafting and Design from ITT Tech.

Over the last decade, I've been deeply involved in plumbing design, which has given me a well-rounded perspective on both the spaces we create and the technical side of design and construction. This experience often makes me think: how do we ensure that our designs truly resonate with the places where people live and work?

As we dive into our educational efforts, I'm aware of the challenge in engaging those of you who already have a wealth of knowledge. Instead of taking on a traditional educator role, I'm excited to tap into the amazing insights that each of you bring to the table. I believe in the idea from Baha'u'llah, who said that "man is a mine rich in gems of inestimable value"—education can help us all uncover those gems and share them for the benefit of everyone.

I'm also inspired by Martin Luther King, Jr., who emphasized the blend of intelligence and character in true education: "Intelligence plus character—that is the goal of true education."

I'm really looking forward to collaborating with all of you in this role and can't wait to see what wonderful opportunities lie ahead for us!

Warm regards,  
Sepideh McQuay

# ARE YOU RESPONSIBLE FOR DESIGNING MEDICAL GAS SYSTEMS?



## ASSE 6060



**October 26-30, 2026**

The final exam shall be completed by 1PM on  
October 30, 2026



**8:00AM - 4:30PM**

Instruction shall be 32 hrs from Mon-Thurs.  
Exam shall be proctored on Friday morning.



**Hampton Inn & Suites**

201 Metro Dr  
Warrington, PA 18976



**\$3,000**

Includes: NFPA 99 Code Book, Daily  
Continental Breakfast, Lunch, and  
ASSE 6060 MGTC Credential

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

**Nikita Patel, PE, ASSE 6060**

**570-899-9090**

**npatel@shermanengineering.com**

**01**

### **Growing Healthcare Industry**

Designing a facility that meets code  
requirements and owner  
preferences will be made easier  
after completion of this course.

**02**

### **Code Requirements**

The ASSE 6060 is now one  
of the approved credentials for  
medical gas designers responsible  
for the sizing, selection, layout,  
and more for medical gas and  
vacuum systems.

**03**

### **Engaging the Facility AHJ**

This course helps to navigate these  
conversations to avoid bearing the  
sole responsibility as the designer.

**04**

### **Professional Growth**

Seamlessly transition into medical  
gas design with minimal support from  
supervisors, helping to become a  
true medical gas design expert

**05**

### **Class + Credential**

This class, hosted by Sherman  
Engineering, will include both the  
course led by Mark Allen, as well as  
the course exam, proctored by MGTC.





**SHAFER, TROXELL & HOWE Inc.**

*Your Solutions Partner Since 1973*

## **Representing:**

**Grundfos • Peerless •**

**PACO • Myers • SyncroFlo •**

**Cougar Controls • Topp Industries •**

**Primex Controls • See Water**



## **Sales and Service Specialization:**

**Sump/Sewage Pump Stations • Water Booster Systems •**

**Fire Pump System • Rainwater Harvesting Systems •**

**Circulating Pumps • Water Filtration Systems**



**Contact our Engineering Team**

**800-233-7718 | [engineering@sthinc.com](mailto:engineering@sthinc.com)**

**97 - D Monocacy Blvd. • Frederick, MD 21701 • [www.sthinc.com](http://www.sthinc.com)**



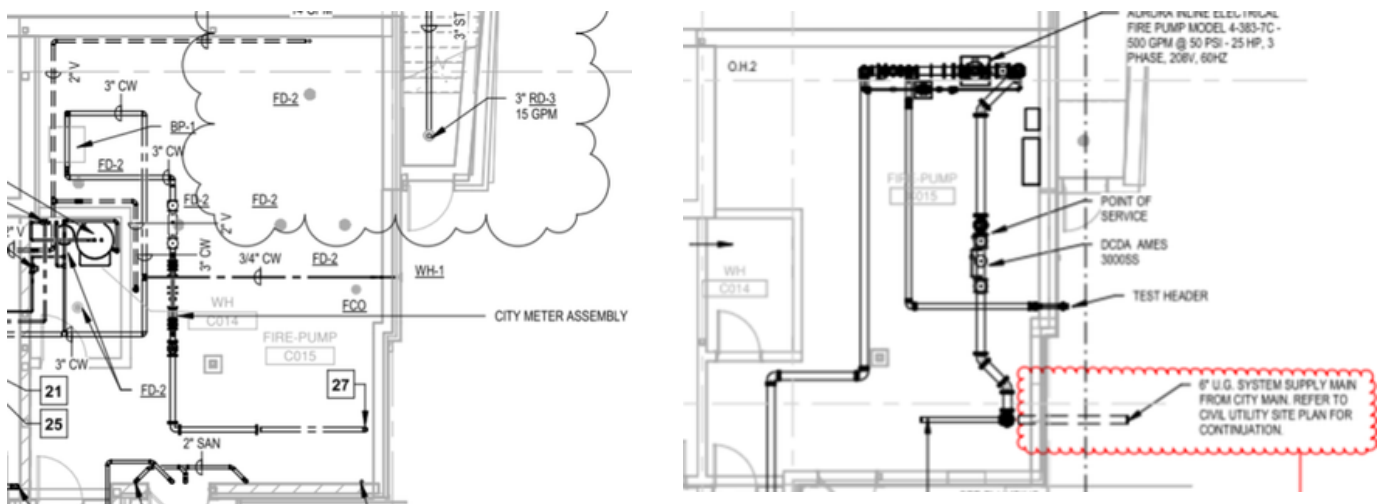
David Bailey  
PLUMBING PLANS REVIEWER'S CORNER

## **PLUMBING PLANS REVIEWER'S CORNER**

by  
David Bailey

Greetings everyone. If you recall in September's DC Chapter Newsletter article, you were presented with a gas riser diagram. There are both minor and major issues with the riser diagram. The minor issue is that the sediment trap was referred to as a dirt leg on the drawing. The major issue is that the sediment traps were located upstream of the respective isolation valves. Oops!

This month's challenge is to determine what is at issue with the installation per screenshot below that has resulted in the required submitting of separate code waiver requests. Are you able to spot the Code Violations?



Note, drawing note #27 signifies 3" domestic water riser. Its location is shown further to the left on the FS plan.

Happy reviewing.

## New ASPE Webinar

by

David Bailey

Please see the screenshot below and check your email box on September 24<sup>th</sup> for more information sent from Gretchen Pienta of Society regarding the Zurn sponsored event.



**RIGHT-SIZING  
TANKLESS WATER HEATING SYSTEMS  
FOR COMMERCIAL BUILDINGS**

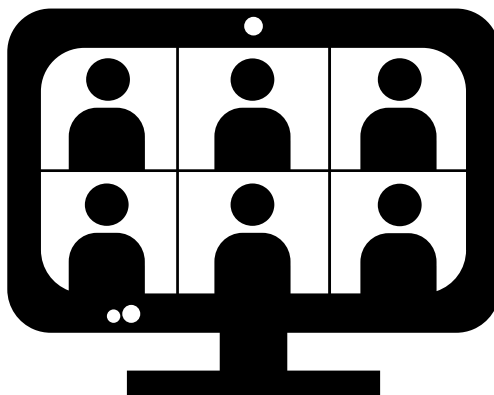
**November 12, 2026 noon CST**

This webinar will outline how to right-size commercial tankless water heaters using real-world usage data. It contrasts traditional sizing methods, such as the modified Hunter's curve, with a data-backed approach that analyzes actual flow rates from thousands of connected facilities. By preventing over-sizing, this method reduces equipment costs, saves space, improves energy efficiency, and ensures reliable hot water delivery.

You will earn 0.1 CEU for participating.

**Cost:**  
FREE for ASPE members | \$50 for nonmembers

If you can't find the email, then access ASPE Education site, view the Upcoming Webinars and Events, and register on-line. Also, earn an additional 0.1 CEU by attending the DC ASPE Chapter Monthly Meeting at Seasons 52 in Tysons Corner Center, Virginia. Lastly, HAWS Master Class is offering an ASPE 0.1 CEU for the one-hour webinar on ANSI/ISEA Z358.1 Compliance for Emergency Eyewash & Showers. This event occurs at 1 PM on Wednesday, October 28<sup>th</sup>. See their website for additional information and registration (if you did not receive notification via email on September 9th).



***Come see the most disruptive break  
through pumping technology the  
industry has seen in decades!***



***-Eliminates the wet well;  
Maintenance***

***-No Odors***

***-Reduce excavation/construction  
costs***

**OverWatch™**  
Direct In-Line Pump System

AMES, Inc. is a manufacturer's representative of water and wastewater treatment, pumping, and HVAC equipment. We serve the municipal, commercial, and industrial markets in Delaware, Maryland, Northern Virginia, West Virginia, and District of Columbia.

**PARTNERING  
WITH THE  
INDUSTRY'S  
PREMIER  
BRANDS**



**PENTAIR**  
AURORA

**TIGERFLOW**

**wahaso**  
water handling solutions

**OverWatch**  
Direct In-Line Pump System

**ZURN**  
GreenTurtle

**USF FABRICATION**  
AN IRVING-CLOUD COMPANY

**STANCOR**

**EXFILM PUMP**

**wilo**  
WILCO  
WILCO  
WILCO

**AK INDUSTRIES**

## PRODUCT OFFERINGS:

- Overwatch Direct Inline Pumping System
- Pumps
- Controls
- Water & Wastewater
- Packaged Systems
- Rainwater & Water Reuse
- Grease/Interceptor

## PARTS & SERVICES

- New Construction Field Service
- Warranty & Repair
- Maintenance Contracts
- Parts & Aftermarket Sales



8918 Herman Drive | Columbia, MD 21045  
www.amesinc.com | info@ames.com



**HOW CAN WE HELP?**  
**410.995.8899**



# Hey YOUNG PROFESSIONALS!

## Learn more about our group!

ASPE Young Professionals (AYP) is dedicated to the needs of plumbing engineers and designers 35 years old and younger. Your local ASPE Chapters have been busy organizing exciting opportunities designed to help you excel in your career, including:

- > Social and networking events
- > Partnerships with other associations
- > Educational offerings
- > Mentoring programs

And more!



Sponsored by:  
**PI** PEAK  
INDUSTRIES

**ASPE  
YOUNG  
PROFESSIONALS®**



## ZURN ELKAY

WATER SOLUTIONS

WORLD DRYER

ELKAY

ZURN

Just manufacturing

WADE

Halsey Taylor

WILKINS  
a KBR company

FROET  
INDUSTRIES, LLC

ATS GREASEwatch®

StainlessDrains.com

### Z100F Floforce



### NEW GRZE Hydromechanical Interceptors



### NEW Concealed Flush Valve



Polished Chrome



Brushed Nickel



Matte Black

## HYDRO-X POWER

### Self Generating Power



Z6950-XL  
Sento Series®  
Sensor Faucet



Z6951-XL  
Fulmer Series®  
Sensor Faucet



Z6953-XL  
Carnegie Series®  
Sensor Faucet



Z6956-XL  
Cumberland Series®  
Sensor Faucet



Z6957-XL  
Nachi Series®  
Sensor Faucet



ZER6000AV-HYD

## ELKAY PRO FILTRATION



### Terrazzo Shower Floors



### Terrazzo Mop Basins



### Vacuum Assist Toilet



## NIAGARA



Industry Leading  
15-Year Warranty



Exceptional Performance  
• Line Carry  
• MaP Score  
• WaterSense® Certified



Powerful, Vacuum-Assist  
Stealth Technology®



BALL VALVES



BALANCING VALVES



GATES, CHECKS, STRAINERS



# Women of ASPE®

## Learn more about our group!

WOA is dedicated to **engaging, retaining,**  
and **advancing** women in the plumbing  
design industry through:

- > Mentoring programs
- > Membership outreach
- > Partnerships with related associations
- > Educational and leadership offerings

And more!





walraven



WWW.VAMDASSOCIATES.COM



8505 Bell Creek Road, Suite E  
Mechanicsville, VA 23116  
804-569-0360  
info@vamdinc.com

COMMERCIAL & INDUSTRIAL  
PLUMBING REP AGENCY FOR  
OVER 40 YEARS

## NO. Features

Virginia Maryland Associates is a manufacturer's representative agency serving the commercial, mechanical, and industrial markets in our territory.

We proudly represent industry-leading manufacturers, providing superior sales and service throughout the entire construction channel. Engineers, wholesalers, and contractors rely on Virginia Maryland Associates from the early design stages to commissioning.

With extensive product knowledge and deep industry expertise, we help clients make informed business decisions that best suit their needs. Our hands-on sales team is ready to assist you in any way possible, making your job a little easier.

We look forward to working with you.

**PLUMBING  
SOLUTIONS &  
SPECIFICATIONS**

**PL-101**