

Healthcare Solutions

The Right Remedies for Patient Safety and System Efficiency



 **AERCO**®  **PVI**® **POWERS**™

 **WATTS**®

Partner with Watts for all your Water Heating Needs

Complete Heating and Water Management Solutions

Infused with more than 150 years of industry expertise, Watts' complete heating and water management solutions provide safe, reliable hot water on demand to patients and medical personnel while mitigating the risk of illnesses due to Legionella and other waterborne bacteria. By partnering with us, you'll have access to an extensive nationwide network of factory-authorized service technicians as well as a tailored, energy-saving system that will deliver increased efficiency, reliability and reduced cost of ownership.

Safety and Comfort for Patients

Your patients' safety is our number one priority. Our comprehensive portfolio of multi-barrier point of source, circulation and point of use solutions will help mitigate the risk of illness and injuries from Legionella and other waterborne pathogens, scalding, and falls due to snow and ice on your facility. We also offer systems that feature alternate fuel capabilities so your patients will always have heat and hot water even in emergency situations.

Operational Efficiency for Owners

Efficiency is at the heart of everything we do. We'll audit and evaluate your property uncovering opportunities you may not even know exist. Our team of industry experts will design a sustainable, efficient, properly sized system that operates at peak performance. With onAER® Predictive Maintenance, you'll have instant insight into how your system is performing and when it needs maintenance. You'll receive bigger savings from less energy waste, a compact footprint and reduced unscheduled maintenance.

Services

As our valued, long-term partner, we offer a comprehensive package of services that take you from evaluation and design to installation and operation into the next 20 years. Services include a water audit and analysis, building commissioning coordination, predictive maintenance tools and a 2-year parts and labor warranty. Plus, you'll have access to our extensive, nationwide network of knowledgeable factory-authorized contractors 24/7.

Patient Safety and Comfort

Protecting Patients and Reducing Your Risk of Liability

Watts family of brands offers a comprehensive portfolio of multi-barrier solutions to ensure patient safety at your facility including Legionella and scalding risk mitigation throughout your water system both at point of service and point of use. From our reliable water heaters, digital mixing systems and line of UV disinfection products that provide safe, precisely-controlled hot water to our snow melting systems that reduce risk of falls from ice and snow, our solutions will keep your patients safe and comfortable throughout their stay.

Legionella Mitigation

Our water heaters and digital mixing systems provide safe hot water on demand without the risk of Legionella through flow control, precise water temperatures or temperature control utilizing integrated storage. Incorporating our line of UV products, water filtration, scale control, backflow preventers and hygienic drains further aids in the reduction of bacteria growing in dead legs and protects against microbiological contamination keeping patients safe from harm.

Storage Water Heaters and Digital Mixing Systems

If you prefer storage water heaters, we'll optimize the storage capacity to meet the specific domestic hot water requirements for your facility.

Digital mixing systems deliver precisely controlled hot water $\pm 2^{\circ}\text{F}$ in accordance with ASSE 17 elevating water temperatures high enough to treat Legionella bacteria, but safe enough for patients.

Tankless Water Heaters

If you prefer tankless water heaters, we'll mitigate the risk of Legionella growth through advanced flow control and precise water temperatures $\pm 2-4^{\circ}\text{F}$ in order to provide safe water to patients.

UV Disinfection

Our UV disinfection products protect against microbiological contamination inactivating up to 99.99% (6-log) of harmful organisms in the water supply including Legionella and other bacteria, viruses and parasites. They require no contact with toxic or corrosive chemicals and produce no harmful byproducts.

Anti-scale Systems

Improves the ability of all components in your system to mitigate risk of Legionella by preventing the build-up of sediment and scale upon which bacteria thrives and hides.

Precise Temperature and Scalding Control

Our water heaters, mixing valves and digital mixing systems provide precise temperature-controlled hot water on demand $\pm 2-4^{\circ}\text{F}$ of set point so your patients receive hot water when they need it without risk of scalding.

Decreased Falls Due to Ice and Snow

Snow and ice can create treacherous conditions in the winter. Our Snow Melt systems will prevent slip and falls eliminating the risk of injuries...and potential legal action. These affordable hydronic or electric snow melting systems have automatic start and stop or idle operation, and intelligent features that reduce the cost of operation and improve reliability.

Legionella Affects Thousands Each Year

The Center for Disease Control estimates 8,000 - 18,000 are hospitalized with Legionella's disease in the U.S. every year. According to the CDC, the key to preventing Legionella's disease and other illness from water-borne bacteria is proper maintenance of the water distribution systems. Factors internal to buildings that can lead to Legionella growth include:

- Water temperature fluctuations
- Water pressure changes
- Inadequate disinfectant
- Water stagnation
- Scale and sediment
- Dead legs

www.cdc.gov/legionella/downloads/toolkit.pdf

Operational Efficiency for Owners

An Optimized System Delivers Bigger Savings

Energy use accounts for one of the biggest portions of a healthcare facility's operating costs. Our dedicated team of engineers have designed state of the art, cost-effective, high efficiency systems for hundreds of facilities across the nation reducing energy bills by 30% on average. We'll also reduce installation costs by creating a tailored, appropriately sized system for your facility featuring equipment that's easy to install and service without interruption to your patients.

Reduced Operating Costs

The best way to reduce operating costs is to ensure your system is optimized to operate at peak performance. Our durable, high efficiency, high performing products give you the reliability you need to ensure your patients are comfortable and have hot water on demand while maximizing savings. Operating efficiency also means you'll have less unscheduled (and costly) maintenance.

High Efficiency Water Heaters and Boilers

Converting to high efficiency water heaters and boilers provides an average of 30% in energy savings which can translate into thousands of dollars annually.

onAER® Predictive Maintenance*

onAER continuously monitors the overall health of your system providing details on overall performance and efficiency levels so you can prevent issues from developing and ensure units are operating at peak performance. onAER also offers trending capabilities, access to maintenance schedules, and sends alerts on faults with suggested causes and actions.

Digital Mixing Systems

Digital mixing systems increase efficiency and reduce broad temperature swings by precisely controlling water temperature $\pm 2^{\circ}\text{F}$ (vs. $\pm 7^{\circ}\text{F}$ of traditional thermostatic mixing valves).

Anti-Scale Systems

Extend the life of your system and prevent scale buildup without the added cost of electricity. Anti-scale systems will improve operational efficiency and help prevent premature failure of your water system without the use of toxic chemicals.

Lower Installation Costs with a Right-sized System

Too often, systems are over-designed with excess venting, piping and capacity. Our engineers will evaluate your facility and create a tailored system that is appropriately sized for your specific requirements. Our right-sized systems will provide the correct sizing for your facility's domestic hot water load so you won't waste energy. It will also provide the least amount of venting and piping so your installation costs will be reduced and you'll need less space for a mechanical room.

Case Study

A top healthcare facility needed to replace their centralized steam system that had been operating at 50-60% efficiency. Compact 96%-efficient AERCO Innovation® 600 and 800 water heaters were sent up the elevator and installed with zero-side clearance for the facility's stringent sterilization requirements. Additionally, a 94%-efficient AERCO Benchmark® 3000 was installed for space heating. All units were individually sidewall-vented. No cranes, disassembly or costly rigging were required due to the units' compact footprints. Return on Investment: 30-40% reduction in fuel operating costs.



*Available on AERCO units only

Services

24/7 Factory-Authorized Support

Our partnership doesn't end once we've created, optimized and delivered your system – we want to ensure your system continues to operate at peak performance. Across the nation, we have an extensive network of trained contractors and service technicians who are ready to partner with you to keep your facility in business even during retrofit/repair. Less disruption to your facility means reduced downtime and translates directly into decreased maintenance costs.



Here's what you can expect:

24/7 Factory-Authorized Support

An extensive, nationwide network of qualified factory service contractors and hotline are available 24/7. We'll work with you over the phone or in person to correct problems and perform maintenance quickly so your patients won't experience any disruptions or discomfort.

Pre-Water Analysis System Audit

We'll perform water consultation and an analysis of your facility and provide a recommendation for proper water treatment.

Predictive Maintenance*

onAER continuously monitors the overall health of your system providing details on overall performance and efficiency levels so you can prevent issues from developing and ensure units are operating at peak performance. onAER gives you the ability to trend data, view when upcoming maintenance is scheduled, or past due, and sends alerts on faults with suggested causes and corrective actions.



Specification and Commissioning

To optimize your system we'll assist you with system design specification as well as the proper installation and commissioning of your buildings.

Service History Database

We'll keep a record of equipment service history so you'll be able to make informed decisions about future service and maintenance.

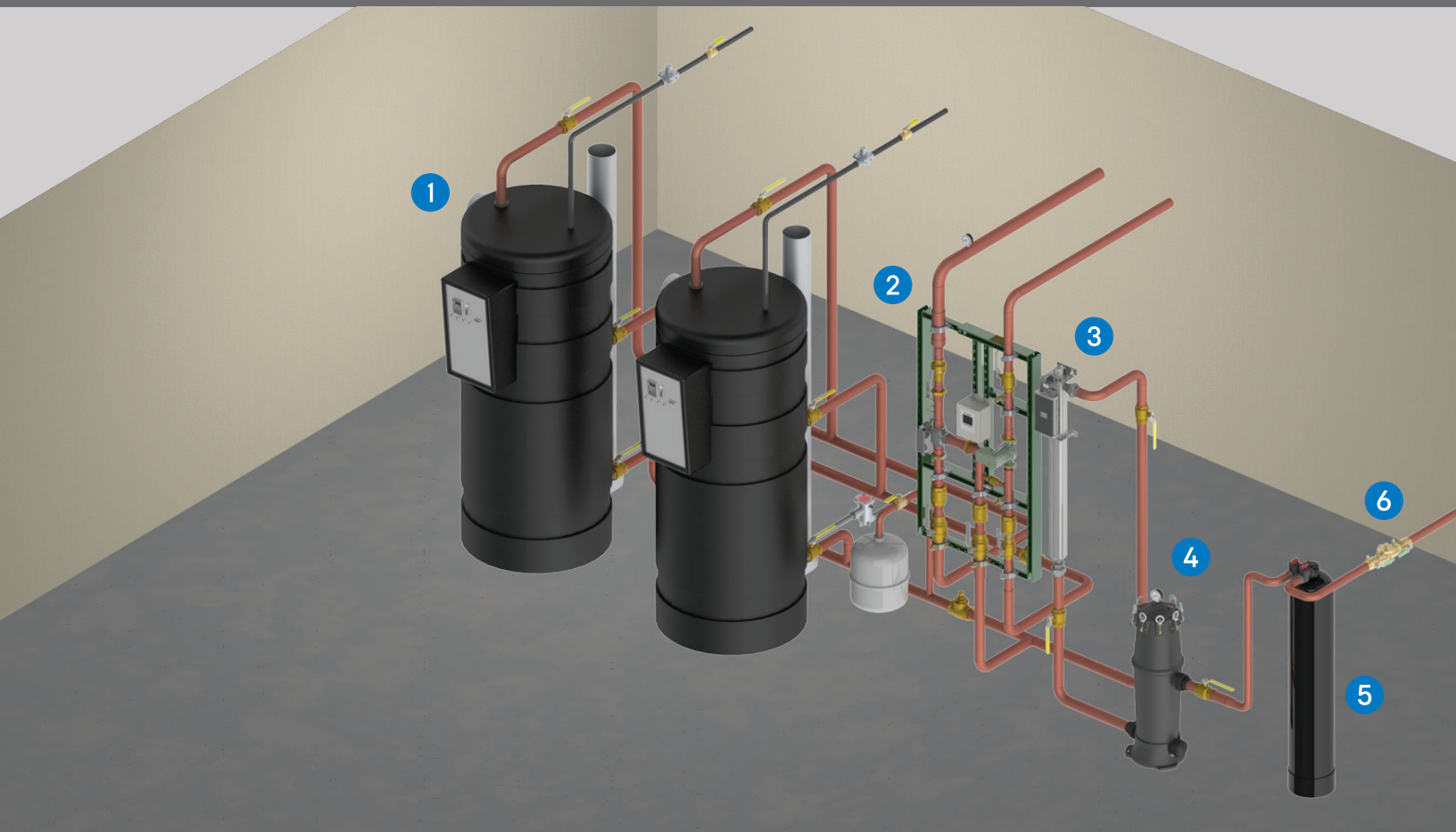
Warranty

2-year parts and labor warranty included.

*available on AERCO units only

Small Facility: Domestic Hot Water Storage Solution

Urgent Care Centers, Free-standing Emergency Departments,
Ambulatory Surgery Centers, Physician Clinics, Diagnostic Centers



Domestic Hot Water

1. PVI® Conquest® water heater
2. Powers™ IntelliStation® digital mixing system

Watts Water Management

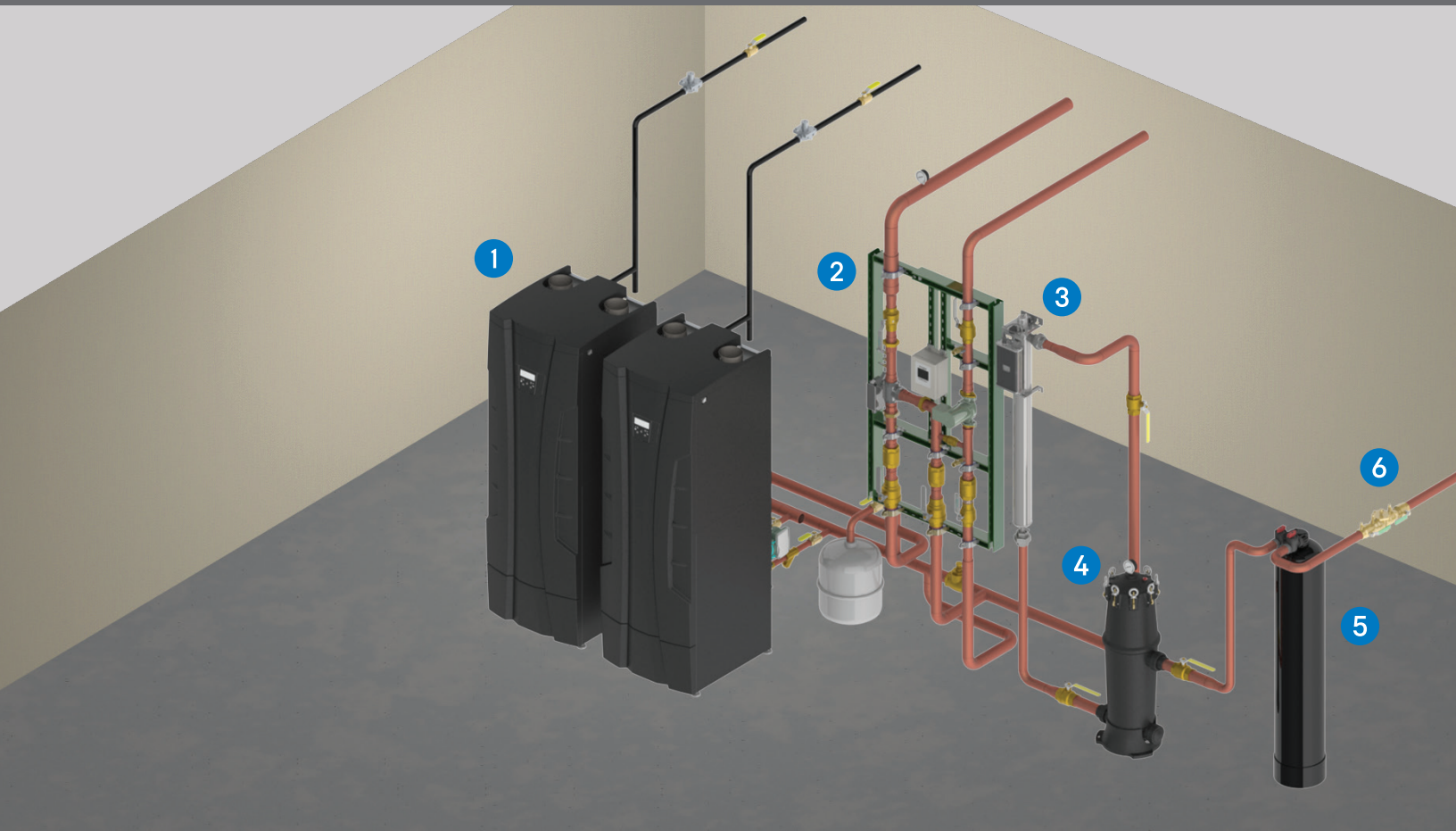
3. SmartStream™ UV disinfection
4. Big Bubba® water filtration
5. OneFlow® anti-scale
6. Backflow Preventer

Although these smaller, free-standing facilities may have lower domestic hot water loads, these loads can be highly variable requiring a system that can ensure consistent hot water service during peak demands.

- Conquest's storage capacities meet the requirements of a small healthcare facility providing higher domestic hot water output per unit as well as overall system longevity with its AquaPLEX® duplex stainless steel alloy construction
- When paired with the IntelliStation, the system delivers precise temperature control $\pm 2^{\circ}\text{F}$ mitigating the risk of Legionella
- SmartStream UV protects against microbiological contamination inactivating up to 99.99% (6-log) of harmful organisms in the water supply
- OneFlow and Big Bubba improve your system's ability to mitigate risk of Legionella by preventing the build-up of sediment and scale upon which bacteria thrives and hides
- Backflow preventers ensure guest safety by keeping the potable system from becoming contaminated from water flowing backwards into the supply lines, caused by back pressure or back-siphoning

Small Facility: Domestic Hot Water Tankless Solution

Urgent Care Centers, Free-standing Emergency Departments,
Ambulatory Surgery Centers, Physician Clinics, Diagnostic Centers



Domestic Hot Water

1. AERCO AM Series water heater
2. Powers IntelliStation digital mixing system

Watts Water Management

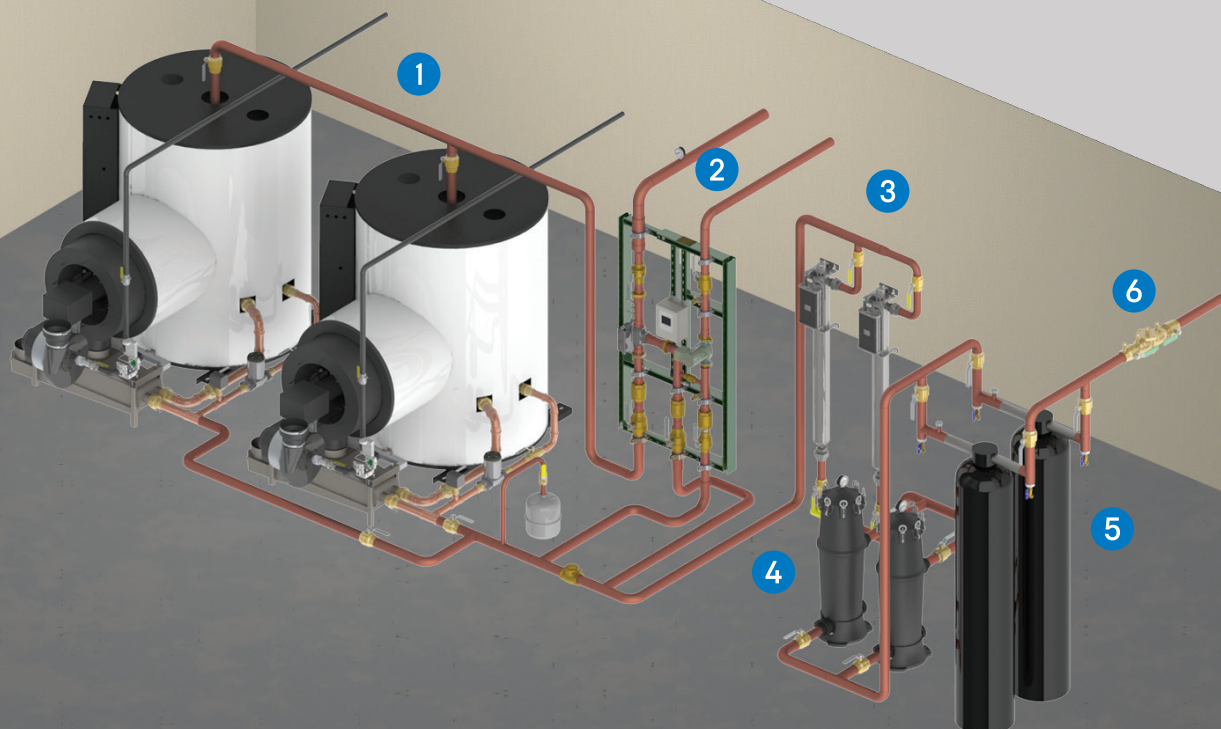
3. SmartStream UV disinfection
4. Big Bubba water filtration
5. OneFlow anti-scale
6. Backflow Preventer

Smaller, free-standing healthcare facilities have lower domestic hot water load requirements and typically no space heating needs, using forced air systems instead.

- AM Series water heaters feature a compact footprint, built-in redundancy and optimized storage capacity that meet building demands while reducing Legionella breeding grounds
- The IntelliStation digital mixing system precisely manages mixed outlet temperature to $\pm 2^{\circ}\text{F}$, ensuring consistent, safe water temperature delivery to guest rooms and public spaces
- SmartStream UV protects against microbiological contamination inactivating up to 99.99% (6-log) of harmful organisms in the water supply
- OneFlow and Big Bubba improve your system's ability to mitigate risk of Legionella by preventing the build-up of sediment and scale upon which bacteria thrives and hides
- Backflow preventers ensure guest safety by keeping the potable system from becoming contaminated from water flowing backwards into the supply lines, caused by back pressure or back-siphoning

Long-Term Care Facility: DHW Storage Solution

Nursing Homes, Assisted Living, Independent Living, Retirement Communities



Domestic Hot Water

1. PVI Turbopower® 96 water heaters
2. Powers IntelliStation digital mixing system

Watts Water Management

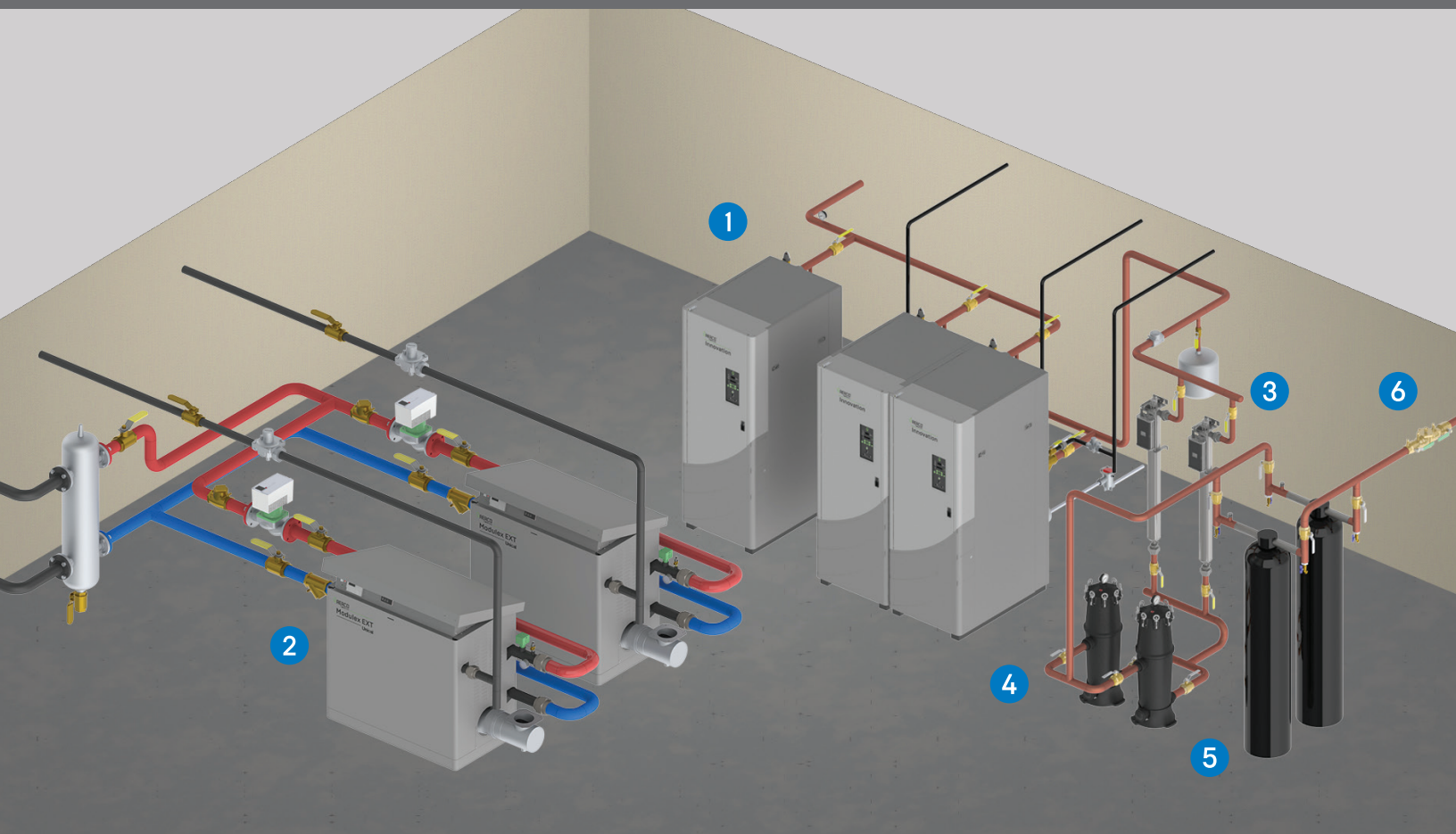
3. SmartStream UV disinfection
4. Big Bubba water filtration
5. OneFlow anti-scale
6. Backflow Preventer

Long-term care facilities usually need a larger system to deliver higher domestic hot water loads for rooms, kitchen and possibly on-premise laundry facilities, with safe water temperatures being paramount.

- In the storage solution, Turbopower 96 water heaters handle loads appropriate for a senior care facility and also offer dual fuel capability
- The IntelliStation digital mixing system precisely manages mixed outlet temperature to $\pm 2^{\circ}\text{F}$, ensuring consistent, safe water temperature delivery to patient rooms and public spaces
- SmartStream UV protects against microbiological contamination inactivating up to 99.99% (6-log) of harmful organisms in the water supply
- OneFlow and Big Bubba improve your system's ability to mitigate risk of Legionella by preventing the build-up of sediment and scale upon which bacteria thrives and hides
- Backflow preventers ensure guest safety by keeping the potable system from becoming contaminated from water flowing backwards into the supply lines, caused by back pressure or back-siphoning

Long-Term Care Facility: DHW Tankless Solution with Hydronic Heating

Nursing Homes, Assisted Living, Independent Living, Retirement Communities



Domestic Hot Water

1. AERCO Innovation water heaters

Space Heating

2. AERCO Modlex EXT boilers

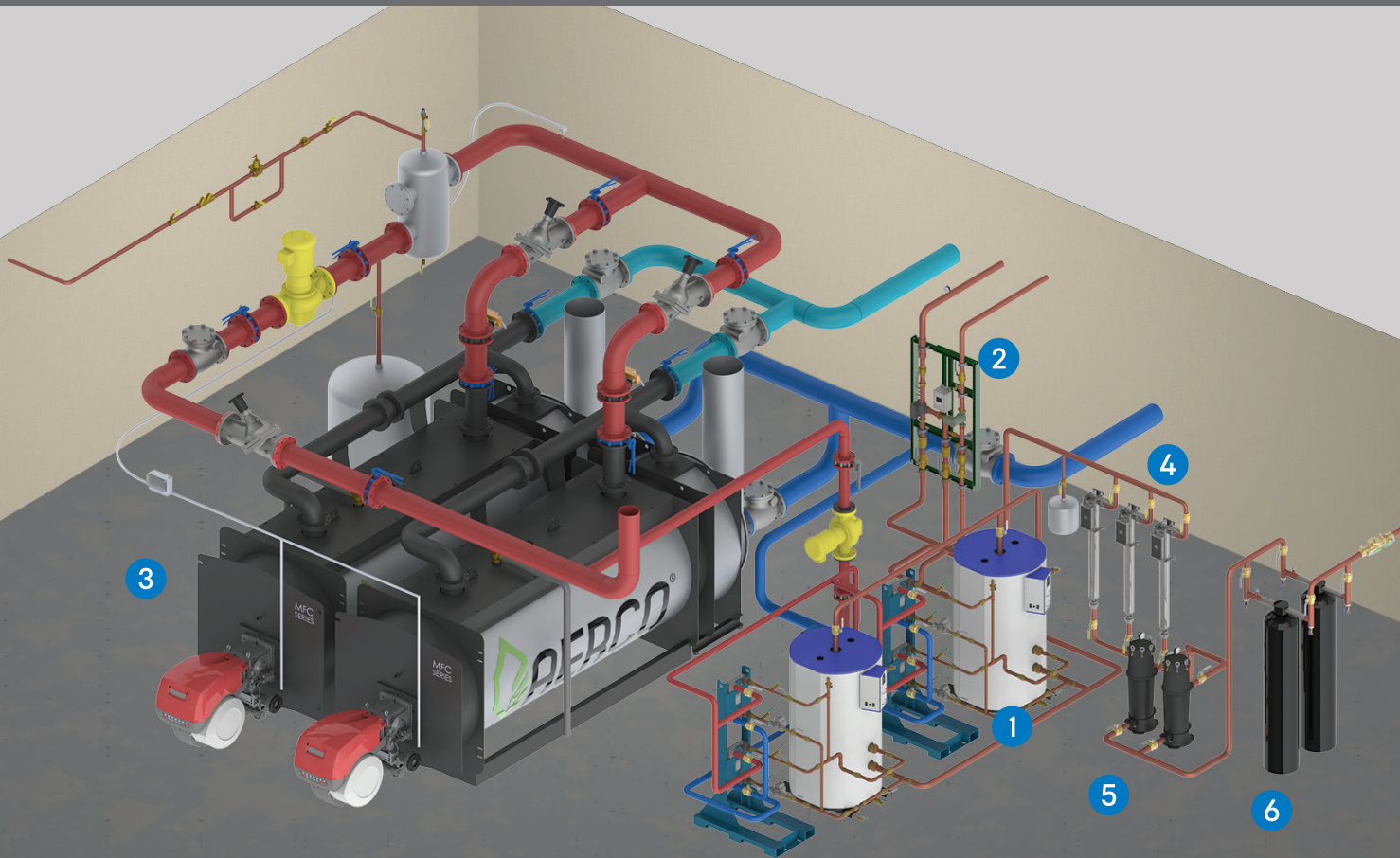
Watts Water Management

3. SmartStream UV disinfection
4. Big Bubba water filtration
5. OneFlow anti-scale
6. Backflow Preventer

In addition to the domestic hot water needs in long-term care facilities, many employ hydronic space heating systems to guarantee consistent resident comfort.

- In the tankless solution, Innovation water heaters handle bigger domestic hot water loads and deliver precise temperature control $\pm 4^{\circ}\text{F}$
- Modlex EXT offers a full range of light commercial boilers that provide internal redundancy for smaller to mid-size heating loads
- SmartStream UV protects against microbiological contamination inactivating up to 99.99% (6-log) of harmful organisms in the water supply
- OneFlow and Big Bubba improve your system's ability to mitigate risk of Legionella by preventing the build-up of sediment and scale upon which bacteria thrives and hides
- Backflow preventers ensure guest safety by keeping the potable system from becoming contaminated from water flowing backwards into the supply lines, caused by back pressure or back-siphoning

Hospital: DHW Storage Solution



Domestic Hot Water

1. PVI EZ Plate® Storage water heaters
2. Powers IntelliStation digital mixing system

Space Heating

3. AERCO MFC® boilers

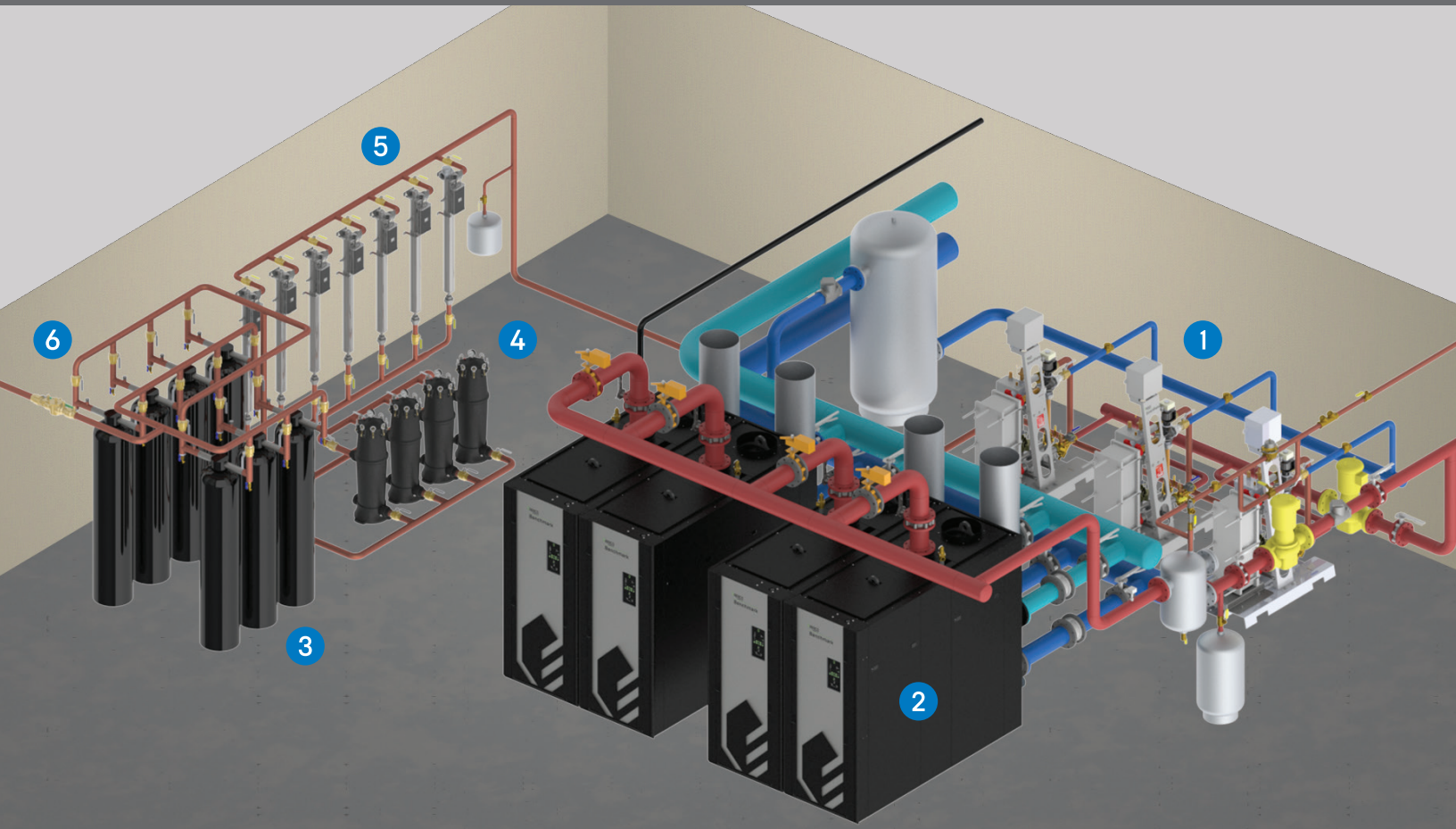
Watts Water Management

4. SmartStream UV disinfection
5. Big Bubba water filtration
6. OneFlow anti-scale

Larger hospitals often call for a domestic hot water storage system to serve the significant variation in demand.

- EZ Plate Storage water heaters are built from AquaPLEX engineered duplex alloy and utilize a double-wall, brazed plate, heat exchanger to provide domestic hot water from boiler water
- MFC (Multi-Fuel Condensing) boilers are capable of firing with multiple fuels including natural gas, propane or #2 fuel oil as back-up for emergencies
- SmartStream UV protects against microbiological contamination inactivating up to 99.99% (6-log) of harmful organisms in the water supply
- OneFlow and Big Bubba improve your system's ability to mitigate risk of Legionella by preventing the build-up of sediment and scale upon which bacteria thrives and hides
- Backflow preventers ensure guest safety by keeping the potable system from becoming contaminated from water flowing backwards into the supply lines, caused by back pressure or back-siphoning

Hospital: DHW Tankless Solution with Hydronic Heating



Domestic Hot Water

1. AERCO SmartPlate water heaters

Space Heating

2. AERCO Benchmark Platinum boilers

Watts Water Management

3. OneFlow anti-scale
4. Big Bubba water filtration
5. SmartStream UV disinfection
6. Backflow Preventer

Today's efficient hospital design separates steam and hot water systems, allowing the use of highly efficient condenser boilers for heating and hot water and a separate smaller steam system for humidification and sterilization.

- Benchmark Platinum's dual returns keep high and low temperature return water separate to increase the heat exchanger's condensing zone, maximizing efficiency up to an additional 7% saving energy and money
- SmartPlates have a high output (90-100 GPM) delivering precise temperatures $\pm 4^{\circ}\text{F}$ in a compact footprint
- SmartStream UV protects against microbiological contamination inactivating up to 99.99% (6-log) of harmful organisms in the water supply
- OneFlow and Big Bubba improve your system's ability to mitigate risk of Legionella by preventing the build-up of sediment and scale upon which bacteria thrives and hides
- Backflow preventers ensure guest safety by keeping the potable system from becoming contaminated from water flowing backwards into the supply lines, caused by back pressure or back-siphoning

Creating Safe, Efficient Systems For Your Facility

A Full Suite of Heating and Water Management Products



1 Steam-to-Water DHW Applications

PVI Cobrex Storage uses steam to provide domestic hot water (similar to AERCO's B+II WaterWizard); Watts SmartStream UV and OneFlow provide additional protection against bacteria and scale build-up

2 Domestic Hot Water and Space Heating

Combination plant featuring AERCO SmartPlate water heaters and AERCO MFC boilers which have dual fuel

capability as back-up for emergencies; this heating system can also serve a Watts Radiant snow melting system

3 Watts Radiant Snow Melting System with tekmar® Controls

Minimizes risk of falls and injuries due to snow and ice on walkways outside hospital's entrance as well as helipads on the roof



4 Thermostatic Valves

Watts thermostatic valves at the lavatory and shower minimize the risks of scalding at the point-of-use

5 Gas Line Connectors

Dormont® SmartSense™ excess flow and thermal shutoff valve protects against excessive gas leaks, fires, and explosions

6 Drains

Watts offers a wide range of premium drains that increase hygiene and conserve water throughout the hospital in patient bathrooms, public lavatories, kitchen and parking garages (including roof drains, trench drains, carriers and BLÜCHER stainless steel drains)

Note: Mechanical rooms are for illustration purpose only and are not properly sized for this specific property.

Heating and Hot Water Solutions

Provide patients with safe, precisely-controlled domestic hot water and reliable heating with our industry-best water heaters, digital mixing valves and hydronic systems, including high efficiency boilers for space heating, easy-to-install snow melting and radiant heating, and advanced controls.



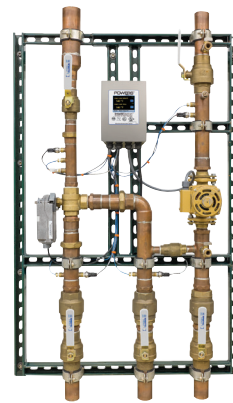
AERCO semi-instantaneous and tankless water heaters



PVI storage and semi-instantaneous AquaPLEX duplex stainless steel water heaters



AERCO condensing high efficiency boilers



Powers IntelliStation digital mixing system



Watts Radiant® and SunTouch snow melting systems



tekmar controls

Water Management

Improve water quality and protect against waterborne microbiological contamination at your facility with our complete line of UV disinfection systems, water quality treatment products, drains, rainwater harvesting and backflow preventers.



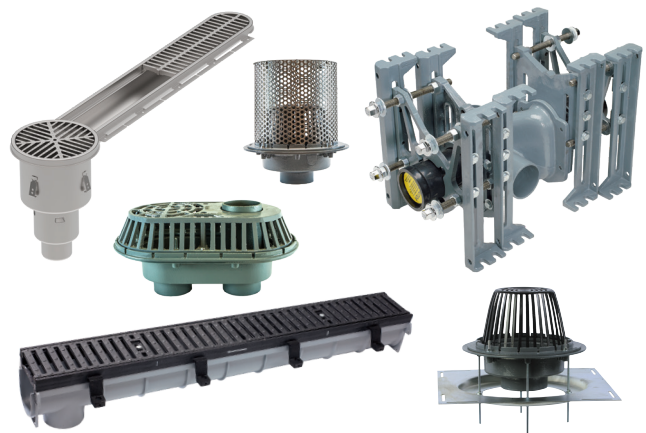
Watts SmartStream UV disinfection systems



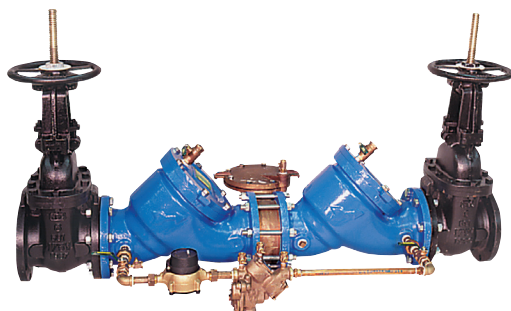
Watts OneFlow anti-scale systems



Watts Big Bubba filtration systems



Watts and BLÜCHER pipes, drains and carriers



Watts Backflow Preventers



RainCycle rainwater harvesting

Watts Family of Brands

With more than 150 years of industry expertise, Watts offers a broad portfolio of innovative heating, plumbing, and water quality solutions. Watts' complete heating and water management solutions help improve the comfort and well-being of patients and medical personnel by providing safe, reliable hot water on demand. Our energy-saving systems and extensive nationwide network of factory-authorized service technicians will provide you with peace of mind by delivering increased efficiency, reliability, and reduced cost of ownership.

For more information, please contact wattshealthcare@wattswater.com.



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