Domestic Hot Water Recirculation

Taco Domestic Hot Water Plumbing Products
Since 1920 Taco has designed and manufactured residential plumbing products in the U.S.A. In fact, we invented the side-arm water heater and the hot water tempering valve. Today, Taco is a third generation family owned company who continues to design and manufacture HVAC and plumbing products in the United States. Our highly skilled work force and state-of-the-art facility in Cranston, Rhode Island builds the highest quality products in the industry.

Domestic Hot Water Recirculation (DHWR)
Taco offers the most complete line of DHWR products in the industry. At Taco, we understand that maximizing comfort, convenience and resource savings, with efficient quality products, is critical to establishing and maintaining long-term relationships with your customers. Taco DHWR products are designed with you, and your customer in mind. Our products are built for a variety of domestic hot water systems and customer preferences. They’re easy to install and provide years of trouble-free performance.

Stop Wasting & Start Saving
The average family of four can waste 12,000 gallons of water per year waiting for hot water to arrive at taps and faucets. In fact, domestic water heating is typically the second or third largest energy user in residential applications. Since 1970, median home size has increased from 1,600 sq./ft. to 2,400 sq./ft., and the distance from the hot water source to the furthest fixture has increased from 30’ to 80’. These significant changes coupled with “low-flow” shower heads and faucets, have dramatically increased the time it takes to deliver hot water. In North America regulations to improve energy efficiency and reduce water consumption are increasing at federal, state, and local levels. Installing a Taco DHW recirculation system will provide your customer’s with instant hot water comfort and convenience while conserving our most precious resource.

There’s Nothing Standard About Our Standards.
Our commitment to driving high efficiency domestic hot water technology is second to none. All Taco DHWR products are e-smart, NSF compliant and backed by Taco’s 3 year warranty. The e-smart tag is your assurance that you’re installing a state-of-the-art resource saver. All products included in this catalog carry the e-smart label.
This domestic hot water circulator has a knack for numbers! SmartPlus™ patented electronics learn and record the family’s hot water usage pattern for the first 7 days and repeats that pattern for the next 7 days providing instant hot water only when needed. This process of learn, record and repeat is continuous and never stops. And when the family leaves for vacation, the SmartPlus recognizes it, and stops pumping hot water until the family returns and resumes hot water use. And it’s so smart, it never needs programming. Simply install it…plug it in… and the SmartPlus does it all.

Features and Benefits:
• Vacation and exercise function
• Factory installed 6’ line cord
• Remote sensor included
• Optional IFC® (Integral Flow Check — 003, 006 models)
• LED indicator lights - Green (power), yellow (mode), and red (sensor connection)
• Quiet, efficient operation
• Unique, replaceable cartridge design, field serviceable
• Unmatched reliability, maintenance free

Installation: Dedicated Return Line Piping (Refer to page 6 diagram)

Hot water when you want it!
The user-activated TacoGenie® mounts under the most remote kitchen or bath fixture. A great retrofit that uses existing plumbing…..no new piping required! When activated, the TacoGenie quickly sends hot water to fixtures and taps and once the hot water arrives, the internal temperature sensor shuts the pump off to prevent excess hot water from entering the cold water line.

Note: The TacoGenie can also be installed at the water heater for “dedicated return line” piping systems.

Features and Benefits:
• Compact design makes it easy to install
• Runs only when activated by user
• Automatically senses and shuts off when water is hot
• Uses existing plumbing – No dedicated return line needed
• Save up to 12,000 gallons of water per year
• Optional wireless remote push button or hard-wired motion sensor available

Installation: Standard Piping, Dedicated Return Line Piping (Refer to page 6 diagram)
Retro-fit domestic hot water installation in a snap!
Using existing plumbing, the Hot-Link® Valve is installed under the most remote kitchen or bath fixture and the recirculation pump is installed back at the water heater. The Hot-Link System recirculates “cooled” water back to the water heater so hot lines remain hot. When hot water arrives at the fixture the Hot-Link valve’s thermal disc “snaps” shut to prevent excess hot water from entering the cold line. Our exclusive “clean-in-place” under sink valve makes it quick and easy to keep the system clean and operating properly. The Hot-Link circulator is provided with an analog timer that allows the user to set the pump for operation during peak usage hours or to run continuous.

Features and Benefits:
• Clean-in-place valve design
• Creates a DHW system without a dedicated return loop piping
• Easy to retrofit to existing plumbing system
• Conserves water by greatly reducing the time it takes to get hot water
• Analog pump timer allows the user to set the system to work during peak hours or to work continuously
• Includes Hot-Link Cartridge Circulator; Hot-Link Valve and Stainless Steel Flex Hoses and 1 full union.

Installation: Standard Piping (Refer to page 6 diagram)
Domestic Hot Water Recirculation

**Plumb n’ Plug®**

*Simply plumb it in … then plug it in!* Periodically recirculates water through the domestic piping system to decrease the delivery time to outlet fixtures and reduce wasted water. Plumb n’ Plug is available with line cord only, analog timer, or digital timer.

**Features and Benefits with an Analog Timer:**
- Factory installed 6’ line cord and 24-hour/15-minute interval analog timer
- Optional 95°F-115°F Aquastat available
- Quiet, efficient operation
- Unique replaceable cartridge design-field serviceable
- Unmatched reliability-maintenance free

**Additional Features with a Digital Timer:**
- Digital timer, 7-day programmable
- LCD display
- Easy-to-use program buttons
- On/off intervals as short as a minute
- 2,500 hour capacitor backup, saves settings

*Installation: Dedicated Return Line Piping (Refer to page 6 diagram)*

**Domestic Hot Water Accessories**

**Great for retrofits!** The timers and aquastat can be installed on any standard Taco 00® circulator. Adding a timer and aquastat to a Taco domestic hot water recirculation circulator will increase system efficiency and eliminate hot water cycling during “off” hours.

*Installation: Taco 00® circulators*
Domestic Hot Water System Piping

**Standard Piping (Non-ReCirc)**
- Tank Type Water Heater
- OR Tankless Water Heater

**Dedicated Return Line Piping**
- Tankless Water Heater
- OR Tank Type Water Heater

**Standard Piping Products:**
- Hot-Link®
- Hot-LinkPlus™
- TacoGenie*

**Dedicated Return Piping Products:**
- SmartPlus™
- TacoGenie*
- Plumb n’ Plug*

* TacoGenie is the only recirculation system recommended for use with tankless water heaters.

**Diagrams are for reference only.**

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\text{\small Standard Piping Products:} \\
\text{\hspace{2em} • Hot-Link®} \\
\text{\hspace{2em} • Hot-LinkPlus™} \\
\text{\hspace{2em} • TacoGenie*} \\
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\text{\small Dedicated Return Piping Products:} \\
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Lead Free Mixing Valves

Control hot water temperatures to your domestic system with mixing valves available for point of use (ASSE 1070) and point of distribution (ASSE 1017) installations. The expanded line up of 5000 and 5120 Series is the ultimate performer for increasing domestic hot water availability and safety.

Features and Benefits:
• UPC Certified
• Certified to NSF/ANSI 61-G
• Optional dial gauge with adapter
• Mixed outlet temperature strip
• Sweat, NPT, Pex, CPVC union connection types
• Meets 2014 lead requirements for potable water
• Increase amount of useful hot water by up to 50%
• Tamper resistant cap

Assortment of Taco Lead-Free Mixing Valves Include:
• 5000 Series Lead Free (ASSE 1017)
• 5120 Series Lead Free (ASSE 1017 and ASSE 1070)
• High Flow 5120 Series Lead Free (ASSE 1017)
• Direct mount 5123 Series WH-N Lead Free (ASSE 1017 and ASSE 1070)

Potable Water Zone Sentry®

The Taco Potable Water Zone Sentry® valve is available in a 2-way sweat configuration with either a normally open or normally closed actuator. Some typical installations would include a combination domestic water and hydronic heating system, culinary installation or water shut off in a potable system.

Features and Benefits:
• Uses only 1.44 Watts in the ON position
• Simple push button actuator removal without draining the system
• Multi-function LED assists with troubleshooting
• Bidirectional flow (cannot install the valve backwards)
• Actuator mounts on the valve in either direction
• Manual override button
• Certified to NSF/ANSI 61-G
• 125 PSI shut-off pressure
FloodBreaker® is a whole house adjustable leak protection system that monitors several aspects of water usage. It shuts off the water supply once any of the monitored settings are reached. The FloodBreaker is NSF 61 certified and is suitable for potable water installations.

**Features and Benefits:**
- Certified to NSF/ANSI 61-G
- Programmable leak detection settings
- Programmable vacation mode leak settings
- Operates on batteries and 9V DC power supply
- Mounts in horizontal or vertical pipe
- Protection from property damage
- Push button reset
- Audible alarm
- Floor sensor
- 3/4", 1", and 1 1/4" NPT union connections

WAGS® Valve shuts off the water supply to domestic water heaters (plus gas supply for gas-fired water heaters) when it detects a water leak, preventing disastrous flooding and damage to structures and belongings. Sleep easy at night, knowing that your floors, rug, basements, and property are safe and dry.

**Features and Benefits:**
- Fully mechanical and requires no external power supply
- Protection from property damage caused by a water heater failure
- Backed by $1,000 lifetime protection policy
- Suitable for most styles of the water heater