Zurn’s AquaVantage AV® Diaphragms Stand Up to the Toughest Conditions

These challenging circumstances, according to the United States Drought Monitor and the EPA, have brought about new ways of thinking and creative ideas for limiting our impact on Earth’s most precious resource. And while high-efficiency toilets and urinals have helped to decrease water usage significantly, there is still a long way to go towards a water conserving future.

Zurn’s diaphragm flush valves have long been known as the most durable in the industry. With their AquaVantage TPE diaphragms, Zurn has shown that their products can stand up to the harshest environments and provide the lowest total cost of ownership to facilities and maintenance staff. As the use of reclaimed water in commercial facilities brings additional considerations regarding maintenance and longevity, Zurn is leading the way once again.

**Reclaimed Water On the Rise**

One conservation method seeing significant growth in the US is the use of reclaimed water to flush toilets and urinals in commercial facilities. While water re-use in irrigation has been around for decades, usage in plumbing applications is only more recently starting to gain traction. Not surprisingly, Florida and California are leading this charge with built-in infrastructure designed to carry reused water. These water lines are identified by purple pipe to signify they are for non-potable water.
Not All Fixtures are Created Equal

As more people turn to water re-use strategies such as these, consideration must be made to the product used in this infrastructure. While the industry has standardized on the purple pipe that is used to carry the reclaimed water, the methods for filtration and purification can vary widely. In all cases there are strict standards that must be met based on the intended use. These standards are mandated and monitored by the individual states and can differ significantly. However, given the growing focus on reclaimed/reuse water, chloramine and chlorination treatment should be within the standards for both biological growth prevention and for residual chlorines.

“Zurn's TPE diaphragms have been shown time and again to provide the highest level of chloramine resistance in the industry. Maintenance staff can be confident that Zurn's product will stand the test of time and reduce their maintenance costs.”

KEVIN GANNON
Product Manager – Zurn Finish Plumbing

While this chlorine treatment is critical to the health and safety of reclaimed water, it can wreak havoc on commercial plumbing fixtures, especially diaphragm flush valves. While standard rubber diaphragms and even synthetic rubber diaphragms can show significant degradation in higher levels of residual chlorine, Zurn's TPE diaphragms have been shown to resist degradation in chloramine levels over 200 times higher than the standard – as high as 50mg/L versus a limit of 0.25mg/L - resulting in a longer life than competitors' diaphragms, even in the harshest conditions. In addition, the orifices in Zurn's AquaVantage diaphragms will accommodate particles up to 400µm in size, or 40 times the high end of the spectrum in recycled water.

In addition to the industry-leading performance of Zurn's AquaVantage flush valves, Zurn's valves an engineered brass alloy with Antimony as a dezincification inhibitor. The end result is an alloy that performs very well in accelerated dezincification tests such as AS2345 and which can hold up against the hardest water.

GO BLUE! for Purple Plumbing

As the use of reclaimed water continues to grow throughout the United States, plumbers, contractors, engineers and end users can rest assured that Zurn's AquaVantage flush valves are more than ready to meet the requirements. Tested to standards far beyond the limit, users will see long-life durability and the lowest cost of ownership in the industry.

For more information on Zurn's long-lasting AquaVantage AV flush valves, please contact your local Sales representative or call Zurn Customer Care at 1.855.ONE.ZURN.