

THE BENEFITS OF

going waterless

By Vedrana Trbusic

Bathroom fixtures
conserve water &
reduce maintenance

In the summer of 2012, the U.S. experienced the worst drought in 50 years, rendering the issue of water conservation a hot topic.

The U.S. Environmental Protection Agency estimated that Americans on average flush 4.8 billion gal per day (gpd) of water. Add to this statistic the concerns over rising costs of water and sewer utilities, and it is not surprising that facility operators and property managers alike are turning to more sustainable technologies in their efforts to cut costs and minimize environmental impact.

Sustainable Solutions

Falcon Waterfree Technologies is a provider of waterless urinals and has developed urinals to save an average of 40,000 gal of water per urinal per year. Waterless urinals require no water or valves. Instead of water, the urinals use gravity to send urine down the drain and operate on a touch-free system consisting of a urinal and a cartridge.

The patented cartridge, which is key to the waterless technology, is locked into the base of the urinal and functions like a funnel. Urine passes through the cartridge, where the waterless system creates an airtight sealant liquid between the cartridge and the restroom, preventing bad odors from escaping the cartridge. The cartridge collects the uric sediment, preventing it from clogging the pipes. This, in turn, translates into zero water waste, clean pipes and an odor-free restroom.

Because they do not require any water supply line, waterless urinals are easy to install and maintain. Therefore, they also are popular among maintenance staff.

"During our 40-plus years in business, we have installed every type of urinal, and when I see [this type of] urinal specified by the engineer, I know ... installation is going to be a breeze," said Bryan Suttles, owner of Suttles Plumbing, a company that has installed thousands of waterless urinals. "The

icing on the cake is when the building engineer smiles as he learns that there won't be any emergencies waking him in the middle of the night due to urinals flooding restrooms."

The benefits of waterless urinals do not stop at water conservation. Because they do not require flushing, there is no need to touch the urinal, which reduces the spread of bacteria. In turn, there also are no bacteria-spreading flush plumes, making the restroom cleaner.

While water saving fixtures are common in new buildings seeking Leadership in Energy and Environmental Design (LEED) certification, buildings undergoing retrofits are another large base of waterless urinal clients, as they seek to reduce water consumption and save costs for the long haul.

"When we decided to remodel our building, we first considered low-flush urinals, but after a colleague recommended water-free urinals, we decided to give them a try," said Randy Dent, facilities manager for the *Los Angeles Times* headquarters. "The most important thing for us was [easy maintenance]. We are very happy with them. We simply replace the cartridge every few months and don't have to worry about daily cleaning and flush valve maintenance."

In the past 12 years, Falcon's waterless urinals have been installed in many commercial and institutional buildings, as well as cultural landmarks around the world, including the Taj Mahal in India, the Staples Center and the Hollywood Bowl in Los Angeles, the Bank of America building in New York City and the World of Coke Building in Atlanta.

It is estimated that by 2030 demand for water will outweigh supply by 40%, which makes the installation of sustainable fixtures essential for all commercial properties. Local governments have been offering incentives through rebate programs to help businesses and residents with upfront costs.

"We're partnering with many counties on their rebate programs—they're a great way of getting businesses interested in making the switch to more sustainable solutions that also save them money in the long term," said Marc Nathanson, CEO of Falcon.

The Role of Public Policy

California presents a good example of how public policy can make a difference. In 2009, the state set a goal to reduce water consumption by 20% by 2020. The results have been encouraging: Today, Southern Californians are using 15% less water per capita than before the law was passed.

Current per capita water use stands at about 150 gpd, compared with 177 gpd before the law, wrote Tom Philp, executive strategist for the Metropolitan Water District of Southern California, in an *SF Gate* blog post. The reduction in water use can be attributed in part to the long-term conservation efforts: It is estimated that in the past few decades, Californians installed about 6.5 million water-saving devices such as high-efficiency toilets, according to Philp. www.mwd.net

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Waterless urinals at Disney Concert Hall in Los Angeles