

BRIEFING 15

FLUSHMATE®

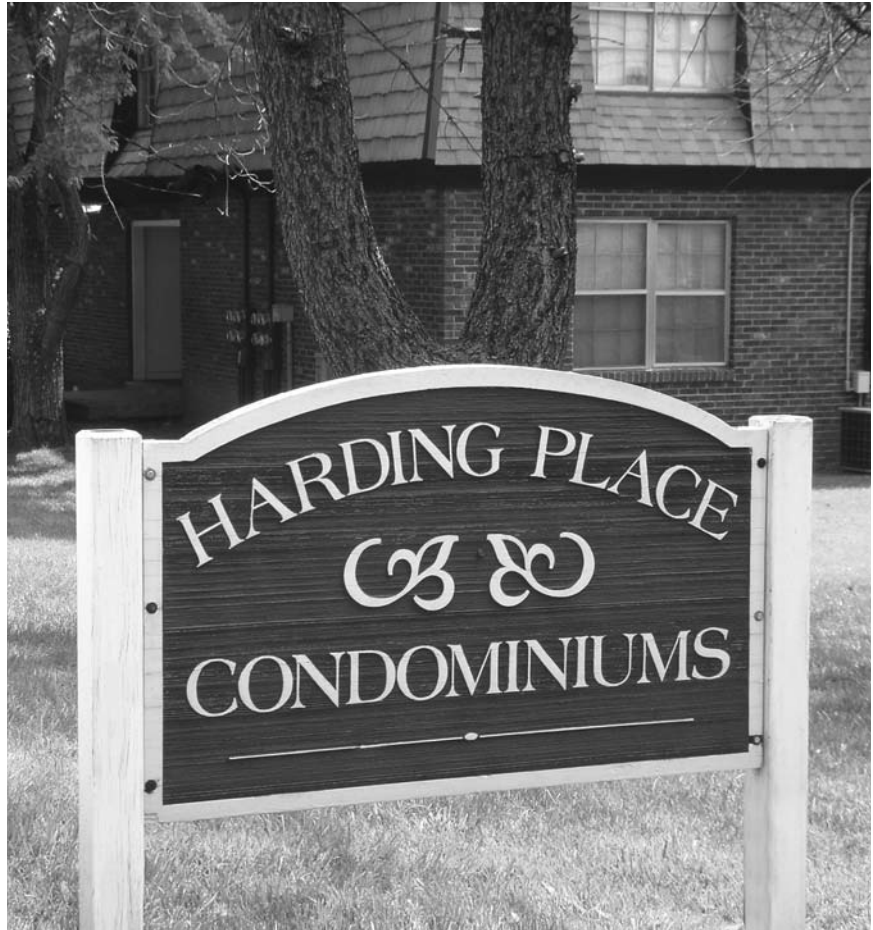
A DIVISION OF SLOAN VALVE COMPANY

Pressure-Assist Retrofits Enable Condo Complex to Maintain Water Efficiency

Ten years ago, the homeowners' association at Harding Place, a 106-unit condominium complex in Nashville, TN, implemented a water conservation program that included replacement of all their existing toilet fixtures with 1.6 gpf pressure-assist toilets. As a result, residents realized a significant drop in their water and sewer bills.

"Before the program, the site's water bills were out of control and adversely affecting the financial health of the community," said Matt McKinney, Property Manager for Harding Place. "Making the investment in water saving fixtures put us back on track. A local firm, Water Management, Inc., (WMI) performed the work to replace ALL of the toilets, update the flow controls on faucets, install high efficiency showerheads and repair any other leaking fixtures."

"However, this past year, the repair parts for the existing pressure vessels inside the toilet tank were discontinued. I was concerned about being able to repair the toilets and maintain the water savings without product support," added McKinney. "Thankfully, Water Management and *FLUSHMATE®* had the ability to solve this problem for us."



The solution was to retrofit the original pressure-assist toilets with the new 1.28 gpf *FLUSHMATE III* pressure-assist vessels, which converted them to High Efficiency Toilets (HET). The HET vessel provides a 20% reduction in consumption from the existing 1.6 gpf pressure vessel, while maintaining high performance. Upgrading to HET-classified toilets also can assist in attaining points for the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) program.

FLUSHMATE is the leading manufacturer of pressure-assist technology in the field. Each *FLUSHMATE* system has a 10-year written warranty, and replacement parts are readily available at dealers throughout the country.

"There was a great deal of time spent installing the toilets 10 years ago, and we didn't want to waste that work or have to throw out a perfectly good toilet," McKinney said. "Essentially, the owners are getting a new toilet with a 10-year warranty. Residents are happy, and the water bills are down."

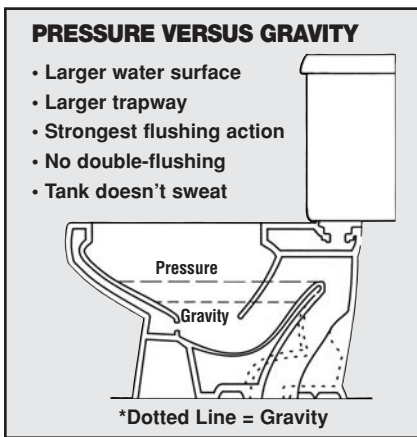
A united effort between *FLUSHMATE* and WMI was a key to bolstering water efficiency at the complex.

"WMI wanted to make sure these retrofits would perform well in the existing china, so we worked closely with *FLUSHMATE* to ensure this was the case," stated Mike Maurer, WMI Vice President. "We have been very pleased with the results and exceptional product support provided by Sloan *FLUSHMATE®*."

“Prior to implementing the retrofit project at Harding Place, we installed several test samples for evaluation to ensure the new 1.28 gpf *FLUSHMATE III* system would perform properly in the existing toilet china,” added Maurer. “This procedure, coupled with *FLUSHMATE’s* extensive lab testing, assured us we would be successful with the program.”

FLUSHMATE’s state-of-the-art testing laboratory in Michigan is used for research and development, which enables *FLUSHMATE* to maintain its edge among pressure-assist manufacturers. The laboratory includes a hydraulic test video recording system; flow meters that display pressure, flow rate and consumption; and a data system that monitors flow meter information. Quality testing is performed to assure proper function and water efficiency of all *FLUSHMATE* products.

While *FLUSHMATE* products are constantly being reviewed and updated, the manufacturer will continue to provide current customers with all the product



support they need for existing vessels, even if production is discontinued on a specific model. In addition, all *FLUSHMATE* parts are made in the U.S., and customers can call the *FLUSHMATE* technical support service line at 1-800-533-3450 for assistance.

Since the change-out at Harding Place, there have been others in public housing

projects, hotels and apartments. All have been equally successful at reducing water usage and avoiding the need to replace toilets.

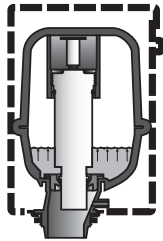
Running the Numbers

For about 10 years, Harding Place used 1.6 gpf toilets and higher flow aerators and showerheads. In 2009, Harding installed new 1.28 gpf *FLUSHMATE* vessels inside its toilets, improved faucet flow controls and more efficient showerheads. Based on current residential consumption levels, consumption is down 30% from the previous year.

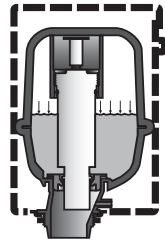
Water Management, Inc. (WMI) has been a leading water efficiency company in the US since 1980. Offering expertise in water conservation, the company creates innovative efficiency programs for Multi-Unit Residential properties, Public Housing Authorities, Industrial, Commercial and Institutional properties, and Utility Companies. With offices in Alexandria, VA, and Nashville, TN, the company’s goal is to help clients nationwide save water, the planet’s most precious resource.

HOW IT WORKS

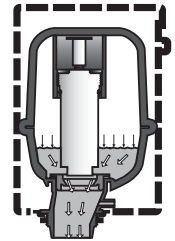
1. As water enters the tank, the air inside is trapped and compressed.



2. The charged toilet is ready to flush.



3. When flushed, the pressure pushes water through the toilet at more than three times the rate of a traditional gravity system.



Average Daily Consumption per unit 1 year PRIOR to 1.28 work

165 gallons per unit per day



Average Daily Consumption per unit 1 year AFTER 1.28 work

115 gallons per unit per day



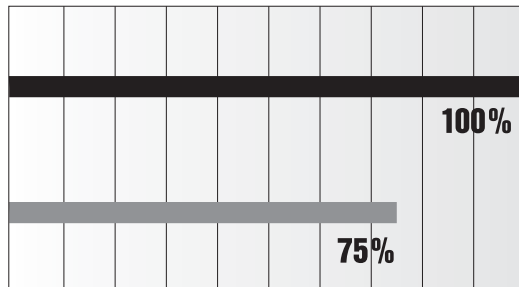
EXTRACTION PERFORMANCE

WATER CLOSET TYPE

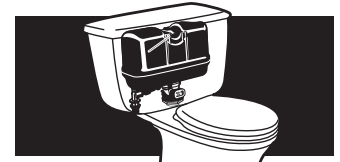
FLUSHMATE Pressure-Assist Toilet



ASME minimum requirements



Based on ASME Standard A112.19.6 Hydraulic Performance Requirement



FLUSHMATE®

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