Running a jail or prison comes with enough headaches without the deliberate flooding of a floor by an inmate vandalizing a toilet—or using a piece of plumbing equipment as a weapon. Case in point: the Randolph County Jail in Asheboro, NC, a facility that opened in May 1997 with an inmate population that averages 200 to 230. Toilet vandalism has been a frequent occurrence at the jail.

“We normally would have at least one incident per week and it would require three staff people to clean up and manage the situation,” says Darren Johnson, Maintenance Supervisor at Randolph County Jail.

Zurn Industries, LLC was contacted this year to solve the problem that resulted in the installation of the new vandal-resistant Zurn ZP6800 Piezo Activated Flushometer for Penal Fixtures. The ZP6800 penal valve is a next generation product that features vandal resistance, significant water savings, and greater institutional control. The valve is a concealed flushometer with stainless steel piezo push button activation. Its platform design is based on the successful Zurn ZTR6200 Solenoid & Piston Kit and has standard flushometer rough-in dimensions.

The Randolph County Jail reports a 50% water savings due to the efficient flush performance the new Zurn ZP6800 penal valve was designed to achieve. The result is a water reduction from 3.5 gallons per flush to 1.75 gallons per flush – a 50% water capture savings per flush over the conventional valve replaced.

In addition to water savings, other features and benefits of the Zurn ZP6800 penal valve include: Integrated Flush Control system that reduces inmate abuse of valuable water resources and hampers nuisance flooding. 96-hour Trap-Seal Flush provides a sentinel flush to refill toilet traps in vacant cells, ensuring the water is not stagnant for excessive periods. Electronic Piezo Pushbutton for flush activation rather than the old mechanical button – eliminates mechanical wear and the associated parts expenses. Solenoid-Piston Valve Technology

“We are greatly impressed with the performance of the new Zurn penal valve. It’s giving our facility a 50% water savings and the vandalism nuisance has been removed, so we are enjoying a labor savings, too.”

– Darren Johnson
Maintenance Supervisor
Randolph County Jail
(Asheboro, NC)
has higher peak flow rates and operates particularly well in facilities with low water pressure. *Manual Override Button* allows for remote flushing without having to enter the cell – promotes guard safety and sanitation.

Any institution—whether it’s a jail, prison or even a psychiatric facility—has full control of the new valve’s performance capabilities, as it requires no specialized tools or electronic equipment when making adjustments. This makes the ZP6800 particularly adaptive to specific needs throughout a prison facility.

Merit Construction of Asheboro handled the installation at the Randolph County Jail. “The installing contractor told us he was impressed with how fast and easy the installation went,” says Bob Carter, Product Manager, Zurn Commercial Brass. “The new Zurn ZP6800 penal valve is easy to install, fits standard combination fixture cutouts, and operates with standard penal ware.”

In addition, the new valve is compatible with four different power supply options to meet customer’s requirements (including long-life batteries that last 10 years). It is suitable for both retrofit and new construction and is “Buy American” (BA) compliant. The Zurn ZP6800 penal valve is also ADA compliant. It requires less than 5 lbs. of pressure to push the piezo button. The button is designed to handle more than one million flush cycles.

What about the flooding problem at the Randolph County Jail? Johnson, the maintenance supervisor, says there have been NO incidents since the spring 2013 installation of the Zurn solution.

“We are greatly impressed with the performance of the new Zurn penal valve,” says Johnson. “It’s giving our facility a 50% water savings and the vandalism nuisance has been removed, so we are enjoying a labor savings, too.”