

BY BILL SWICHTENBERG

# Reducing Waste in the Restroom

*Facility owners are looking to reduce waste and save money in the restroom. Distributors willing to work with the owners will reap dividends in the long run.*

**I**n today's tough economic times, conservation and reducing waste are two important considerations for facility owners looking to save money.

Distributors can secure an advantage on their competition by offering products that fulfill these needs. In the restroom, there are many products available that attempt to eliminate or reduce waste depending on the owner's preferences. Toilets, dispensers, dryers, faucets and soap are all areas where waste can be minimized and labor costs saved.

## Paper towels

One area that can create much excessive waste in the restroom is the hand towel. While easier to service, folded towel systems allow users to take as many towels as they want. People also can take a roll of towels back to their desk. In addition, these systems can make it harder for maintenance personnel to clean.

In order to reduce waste, some facilities are using touchless

dispensers that can restrict the amount or size of the towel. These systems make it difficult for users to take more than one towel.

Some companies have introduced a paper saving mode to their dispensers to cut down on waste. Many restroom users quickly take two sheets of towels out of habit when drying their hands.

According to Greg Kampschroer, vice president at Palmer Fixture, one of their new hands-free dispensers has a time delay mode to reduce waste. The facility manager can set the dispenser for a one-, two- or three-second delay. The idea being, the longer it takes for the next towel to dispense, the less likely the user will take another towel.

"We are kind of against the grain because we're not concerned about

selling paper," says Kampschroer. "While many distributors blow off this idea because they don't see the value, smarter salespeople can use these products as a selling tool to schools, institutions and others who are demanding lower waste."

These units also can be programmed for the size of the sheet length delivered. Options include 9-, 12- or 15-in. sheets. This gives the facility manager the flexibility to decide how much paper the customer receives.

Paper towels are also used for opening the restroom door. According to Oscar Wientjes, Global Marketing Director at Technical Concepts, installing an automatic restroom door opener is the latest trend in further eliminating waste, while boosting image and hygiene.

## Dryers

Hand dryers can help eliminate paper use altogether. According to Mike Robert, vice president of technical services at American Dryer, hand dryers can achieve up to a 95 percent savings over paper towels. These savings are the result of eliminating the maintenance and operating expenses associated with paper towels.

Traditional hand dryers move large volumes of heated air over the hands to speed up the evaporation of water. The only problem is that a thin layer of surface water on a user's hands,



Time delays and programmable sheet lengths are two waste reducing features available for dispensers.



called the boundary layer, is difficult to remove with just heated air. Often, the result is that the customer's hands don't come completely dry.

In order to expedite or break up this boundary layer, some dryers have turned to high-velocity air, as well as heat, according to Robert.

"We have experimented with different nozzles and shapes to find the right combination of speed and volume of air. The end result is hands are dried fast and feel thoroughly dry," says Robert.

American Dryer's ExtremeAir dryer evaporates water on hands in 10 to 15 seconds and uses 80 percent less energy than traditional dryers. The dryer also helps qualify for LEED building credits in two categories.

"With the cost of paper towels going up, there has been a movement away from their use," says Robert.

### Toilets

Another inefficient appliance in the restroom is the toilet. In most toilets, as much as 1.25 gal. of water per flush can be wasted due to an imbalance between the toilet tank and bowl levels. According to Rich Katzmman, chief operating officer of MJSI Inc., most fill valves deliver too much water to the bowl. The valves are set at the factory to fill the largest bowls.

"When our fill valve is installed, a calibration feature properly balances the toilet's tank and bowl water levels without sacrificing the flush efficiency," says Katzmman.

If there is a leak in the toilet, another 200 gal. per day of water can be wasted. The MJSI valve system also detects leaks and provides an audible signal when a leak is detected.

"If the flapper lets water leak, the air routed in the jet system makes a noticeable 'cha' sound, which means the flapper needs to be replaced," says Katzmman.

### Faucets

Water can also be saved through the use of efficient faucets. A faucet that provides the user water only when needed can result in reduced water usage. Technical Concepts has developed a 'Surround Sensor Technology' that senses the user from any angle,

An automatic faucet system can reduce water usage by up to 70 percent.



ensuring activation only when hands are near the faucet.

"Water savings up to 70 percent are possible when the faucet is equipped with a 0.5 gal. per minute flow control aerator compared to a typical faucet that runs 2.2 gal. per minute," says Wientjes. Technical Concepts' proprietary dry technology keeps the water away from the flow control and electronics making it reliable and a key waste and maintenance advantage over traditional solenoid technology. If an object is in the sensor's view continuously for 90 seconds, the faucet will automatically shut off. The water will remain off until the object is removed.

### Soap

Reducing chemical and packaging waste from hand-soap is a key requirement in restrooms today, according to Wientjes. Modern hand-soap systems, like the new AutoFoam, feature precision metered dispensing of concentrated soap, eliminating over-use and waste. Pouch refills can reduce packaging waste up to 80 percent over traditional bag-in-box systems while a fresh pump with every refill

eliminates mess, clogs and waste from leaking.

A very cost-effective way to reduce soap waste is spray soap. A specially metered pump delivers 0.2ml vs. the 0.7 to 1.5ml over conventional systems. "With every push, soap is sprayed over the hand and the palm is cover," says Wientjes. "You get a full feel with just a little soap."

Over time, waste can be prevented or reduced in the restroom. There are plenty of product offerings that can help the facility manager with this task. **MS**