## THE CASE FOR THE TOUCHLESS RESTROOM

A white paper brought to you by



## ESIGNING A TOUCHLESS RESTROOM IS A COMMON to understand how to use SENSE IDEA. ADVANTAGES INCLUDE IMPROVED HYGIENE. BETTER IMAGE OF THE RESTROOM AND REDUCED CONSUMPTION OF NATURAL RESOURCES.

So why aren't touchless restrooms universal? Beyond the fact that many restrooms were designed before touchless technology made its way into the marketplace, one barrier to adoption is the myths and misconceptions that circulate among facilities executives. Facilities executives who get past the myths are in a much better position to weigh the benefits of a touchless restroom.

One common myth is that occupants don't know how to use touchless technology and can easily become frustrated. Some facilities executives imagine users becoming frustrated when they don't properly trigger the sensor. Also, facilities executives may worry that users believe a soap dispenser is empty if it doesn't activate right away.

But product testing has shown that the overwhelming majority of occupants are able touchless devices during their first time using the equipment. Moreover, if occupants are becoming frustrated, they aren't showing it. One of the leading drivers of touch-

less technology is simple demand from tenants and building occupants.

"We did focus groups with our company, and out of the 209 properties, touchless is the most asked-for feature in any restroom environment," says Tom Morris, senior operations manager for

General Growth Properties' 1.3million-squarefoot mall in San Antonio, Texas.

What's more. touchless technology is increasingly adjustable. And that adjustability translates into smoother



A round table discussion with 11 facilities executives on the myths and realities of the touchless restroom served as the foundation for this white paper.

operation for occupants. The enMotion® touchless roll towel dispenser is one example. Hand motion activates the sensor, triggering the system to dispense a single paper towel. A delay mechanism reduces waste by discouraging users from taking multiple towels. Both the delay and the distance required for activation can

ter than it was years ago, especially with the life of the batteries."

Some facilities executives remain leery of touchless restroom technology because they are afraid a touchless restroom means constant battery changes. When it comes to new construction, most touchless equipment of-

"I wouldn't be too concerned about upgrading now because of where the technology has progressed. It is infinitely better than it was years ago."

- Guy Bent, Facility Operations Manager, Perot Systems

be adjusted, which means facilities executives with smaller restrooms can set a shorter distance to reduce false sensor activation. Facilities executives can also adjust towel length.

Another common misconception is that touchless restroom technology means trouble for maintenance staff. But touchless restroom technology has matured, and manufacturers are adding new features to improve operation. Some new touchless faucets, for example, allow maintenance employees to use handheld wireless devices to make remote adjustments in the sensing range, water metering modes and time delay in the faucets. The system can also display usage history and battery status.

### **FUNCTIONALITY MATTERS**

Problems with earlier generations of devices have created the persistent myth that many touchless products don't work well. Facilities executives shouldn't let prior experience with older touchless technology color their perceptions of the new products currently on the market.

"I wouldn't be too concerned about upgrading now because of where the technology has progressed," says Guy Bent, facility operations manager for Perot Systems. "It is infinitely betfers the option of AC power. When it comes to retrofits, batteries remain common.

Batteries need not be troublesome, however. The batteries in the enMotion® dispenser are designed to last for one year for an average restroom. A recent rollout of 110 enMotion® dispensers at

a 1-million-square-foot corporate campus in Plano, Texas, for example, has provided little battery trouble. In six months, not a single set of batteries has had to be changed. "And some of those restrooms get very heavy traffic,"

Not all touchless technology requires batteries. A zero-water-consumption urinal, for example, requires no power, and offers the possibility of saving up to an average of 40,000 gallons of water annually. New designs for faucets now incorporate photovoltaic cells that generate power from ambient light, greatly reducing the need for battery changes. Other power options include faucets that use miniature turbines that generate power from the water supply.

Successful touchless restrooms depend on correct installation, and facilities executives need to look beyond the technology to factor water quality into the equation. Buildings in areas prone to hard water may find that fixtures operate best when water softeners are used, for example.

One final myth? Touchless technology is expensive. Facilities executives who are responsible for restrooms designed with yesterday's technology may give little thought to adding touchless equipment because they believe replacement is cost-prohibitive when the equipment is still functional.

While it may be impractical for some facilities executives to convert an existing restroom to entirely touchless operation, touchless towel dispensers, for example, can start a restroom down the touchless path at a modest cost compared to overhauling an entire restroom.

#### **TOUCHING ON BENEFITS**

Because misconceptions about touchless technology abound, it is important to review some of the advantages a touchless restroom offers. Touchless technology can improve hygiene, boost the image of a facility and reduce resource consumption. It can also solve problems traditional restroom technology may not have been able to address.

Without question, a touchless restroom improves hygiene compared to traditional designs. Contaminated fixtures or surfaces can be a major harbor for germs. And occupants who perceive a restroom to be dirty or contaminated are less likely to stay in it to properly wash.

"For my company, the switch was instigated by management saying, 'Hey, we'd rather be a place that has a better hygiene setup so that we won't have to worry about those issues constantly," says John Luongo, property manager for Easton Development Inc.

Hygiene can be especially important for facilities executives who are wrestling with how to handle a potential pandemic flu outbreak based on avian influenza. Facilities that have touchless restrooms will be ahead of the game when it comes to dealing with a pandemic flu outbreak.

Touchless restrooms will contribute to improved hygiene even if a facility never has to confront a pandemic flu outbreak. The fewer surfaces an occupant has to touch in the restroom, the lower the risk of spreading germs.

Touchless technology also adds a more sophisticated look to restrooms. An overwhelming majority of occupants consider touchless technology to be more upscale than traditional restroom technology. And manufacturers have noticed the desire for products with a more upscale look — a new enMotion® touchless stainless steel towel dispenser, for example, is aimed at providing roll towel dispensing for restrooms in Class A office facilities.

Image-conscious property managers know that a restroom's look can affect tenant satisfaction, which can have a direct bearing on occupancy. Tenant satisfaction and the desire to maintain a quality image are two leading reasons property managers consider upgrading their restrooms to touchless technology.

Touchless restrooms offer environmental benefits as well. Touchless flush valves and faucets offer the potential for reduced water consumption.

And the delay mechanism and individual dispensing feature mean touchless towel dispensers have the ability to reduce paper towel consumption. Towel selection can also play a role in sustainability. The enMotion® towels, for example, contain an EPA-compliant of-

#### ROUND TABLE PARTICIPANTS

Information for this white paper was gathered from a June round table discussion in Dallas and in follow-up interviews.



Tomi Sue Beechum Facility Manager Jones Lang LaSalle



Tanya Corbridge **Property Manager** Waterfront Properties Ltd. General Growth Properties



Tom Morris Senior Op. Manager



**Becky Smith** Asst. Property Manager Hillwood Development Co.



Renee Massey West Silver Group



Arda Widman Facility Manager Cushman & Wakefield



**Guy Bent** Facility Op. Manager Perot Systems Corp.



John Luongo Property Manager Easton Development Inc.



Scott Ritzer Facility Op. Manager AEGON DMS



**David Sunderland** President McMarr Properties



Joi Taylor Property Manager Rector Management Inc.

fering in its line of products.

Waterless urinals can slash water consumption even more drastically.

"I think if you go with the touch-free waterless urinals, it shows that we are doing something to help the environment," says Scott Ritzer, facility operations manager for AEGON Direct Marketing Services.

Ritzer is considering waterless urinals because installing waterless urinals would be a way to demonstrate a company's commitment

There's another problem with folded dispensers: jamming, often caused by overloading. "You might only think people would use two or three, but many times towels get jammed and people just pull a clump of them out," says Joi Taylor, property manager for Rector Management in San Antonio, Texas. "I know that I'll have a mother come into my restroom with three kids and before you know it there are 15 towels all over the place."

Facilities executives who are looking to



# "Touchless is the most asked-for feature in any restroom environment."

—Tom Morris, Senior Operations Manager, **General Growth Properties**  clamp down on consumption should realize that no product is a substitute for staff training. Staff who change towels based on a set schedule may need some time to adapt to new dispensers. "It's not just about teaching the tenants," says Morris. "It's teaching the employees who are changing the towels so that they aren't throwing out rolls

that have towels left because they don't want to come back. There can be a lot of issues with that."

to conserving water, particularly with a drought striking Dallas over the summer.

Some facilities executives are still skeptical about the ability of touchless towel dispensers to reduce the consumption of natural resources. Such facilities executives mistakenly look at the specifications on towel dispensers without considering real-world usage factors. The key to understanding how touchless dispensers can save on paper towels is to consider actual towel use, not the capacity of the dispensers. A folded towel dispenser may hold 500 towels, for example. Set to dispense 1-foot towels, a roll of premium paper in the enMotion® dispenser would dispense 425 towels.

The difference is in the dispensers — users generally will needlessly choose two or three towels when using a folded towel dispenser, greatly increasing waste and reducing the number of users who can be served before the towels need to be refilled. The single-towel dispensing and time delay built into the touchless enMotion® dispenser, on the other hand, ensures that users don't take more towels than they need.

#### SOLVING PROBLEMS

Touchless equipment also can solve problems posed by traditional equipment. One facilities executive said she was considering the move to touchless soap dispensers because the soap dispensers that sat on the sink in her facility kept disappearing.

For another facilities executive, touchless towel dispensers eliminated a costly problem: users were lining toilet seats with paper towels and then flushing them, which led to repeated repairs to unblock the lines. The touchless dispensers made it more difficult for users to grab a mass of paper towels, reducing the number of blockages.

"That problem has gone down significantly, and just because we put in the touch-free paper towels," says Renee Massey, portfolio manager for the West Silver Group. "For us, it has just been a great move." 💠