## Innovations Help Reduce

Assist customers with accessorizing their restrooms





New light-activated lavatory systems help maximize water and energy savings. Photovoltaic cells integrated into the top of a lavatory can convert normal restroom lighting or daylighting into energy which is stored and used to power valves and sensors in the handwashing fixture.

nother china lav is chipped, a faucet sensor has been punctured, several toilet partitions have new names etched into their surface and floors are littered. Sound like familiar customer problems? It may be time to consider upgrading their restrooms with some innovative fixtures and accessories that can help reduce repair costs and maintenance time.

## Going green

Arguably the biggest factor today impacting restroom design and new product development is "green" or sustainable design. Whether striving for Leadership in Energy and Environmental Design (LEED) credits through the U.S. Green Building Council or simply lowering energy and water/sewer costs, facilities have more options. And, many are finding that the investment is worthwhile as the durability, higher quality, lower maintenance and reduced operating costs over the life of the building ultimately result in big savings.

Today there are many new environmentally-friendly technologies to consider, such as light-powered handwashing fixtures that incorporate photovoltaic cells into the top of the lavatory to convert light into energy. Since they operate on normal restroom lighting or natural lighting, these fixtures do not use any batteries. The technology makes the units virtually maintenance-free.

Another benefit is that lavatory systems are made of durable solid surface materials. Traditional china lavs cannot withstand impact and once chipped are not repairable and must be replaced. Conversely, solid surfaces that meet ANSI/ICPA SS-1-2001, not only resist germs, but also stand up to stains, burns, chemicals, impact and graffiti. The integrated bowl surface can be quickly wiped clean with everyday cleaners, and a fine-grit sandpaper can be used to gently sand away any imperfections, such as a scratch or temporary

clean with everyday cleaners, and a fine-grit sandpaper can be used to gently sand away any imperfections, such as a scratch or temporary stain. Best of all, solid surface materials can be repaired if they become chipped or cracked.

There are a few other advantages to choosing lavatory systems over individual sinks. Soap dispensers are often integrated into the lavatory units and are designed to drip right into the bowl. The same goes for the touch-free, sensor-operated faucets, which means hardware is hidden out of reach of vandals.

Also look for lavatory systems that are designed to be universal and maximize your customer's investment. Multi-height lavatories have a taller sink, as well as a lower, ADA-compliant sink for children or people in wheelchairs. The solid surface material is molded into an interesting wave-shaped design that is as attractive as it is convenient to use.

## **Assessing accessories**

Waterless urinals and low-flow faucets can help reduce water use in the restroom, but if you do not carefully consider restroom accessories, you could be flushing some of these savings down the drain. Accessories can be full of hidden costs. Consider paper towels vs. hand dryers, for example.

Hand dryers cost slightly more than paper towel dispensers initially, but hand dryers are a smart alternative. The energy to operate new generation hand dryers is less than 10 percent of the cost of paper towels, which includes eliminating labor time and costs for ordering, storing, replenishing dispensers, tidying up and disposing of paper towels. Look for higher-quality accessories made for high-traffic washrooms for longevity. New touch-free hand dryers, for example, can quickly dry hands in less than 25 seconds.

Fixtures and accessories that operate with sensor-controlled electronics are a key trend in restrooms. Nobody wants to touch dirty surfaces in public restrooms, so offering touchless equipment improves hygiene and gives users a better experience in the facility. Everything from soap dispensers and paper towel dispensers to hand dryers are now available in hands-free models.

The latest advance in faucets, capacitive sensing technology, takes touchless a step further and is easier to use and activate — it instinctively detects a user's presence from any angle of approach. Capacitive sensing



technology creates an omni-directional detection zone that surrounds the entire spout, rather than a sensor window commonly used with infrared-controlled faucets. All of the faucet's mechanical and electrical components are concealed in a water-resistant housing.

New capacitive sensing technology provides consistent operation in nearly any restroom environment. Reflective surfaces, soap scum build-up, different user skin tones or other sensor activated devices in the room will not interfere with faucet performance. Improved

touch-free activation and no sensors, handles or knobs to vandalize means less user frustration, thus fewer repair trips.

## **Trimming time**

There are also some less tech savvy ways to cut restroom maintenance time. Installing jumbo toilet tissue dispensers that hold larger rolls and more of them is an easy way to reduce trips for restocking. Sometimes a seemingly small change, such as using ceiling-mounted toilet partitions, can simplify cleaning. This allows janitorial staff to quickly clean floors without getting around the partitions.

Repairs can be a huge drain on both time and the budget, so be sure to look for ways to lessen the temptation for vandals. Stainless steel is generally a good choice because it stands up to abuse. Some facilities have even moved to stainless steel toilet partitions as a way to curtail graffiti and other damage inside stalls.

Better commercial grade fixtures and accessories have built-in vandalresistant features. Vending and dispenser units, for example, should have a sturdy, full-length hinge and a lock. Recessing accessories into the wall is another good option. Trash receptacles, napkin dispensers and other items can be flush-mounted so that they cannot be knocked off the wall. It is also a space saver and gives restrooms a neat, uncluttered look.

The best way to determine which products and technologies make the most sense for your restroom application is to first consider traffic volume and anticipate challenges before they occur. Take into account any special needs and the people who will be using the facilities most frequently. Will there be many children or individuals with physical disabilities? Or parents with children? Manufacturers specializing in complete restroom solutions from grab bars to lavatory systems are a helpful resource, as are local architects, plumbing engineers and code experts.

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