# next generation commercial restroom design

New high-performance commercial restroom products and technologies enhance aesthetics, maintainability, operational efficiency and more. BY KRIS ALDERSON



he look, function and efficiency of today's commercial restroom design continue to be bolstered by new technology, material and product design innovations. Designed with architects and designers, building management/staff, and consumers/restroom patrons in mind, these new "intelligent" restroom materials and furnishings offer a substantial list of features and benefits for all.

## sustainable materials

More manufacturers are incorporating sustainable materials into restroom products, which, in addition to sustainability benefits, increase the durability, maintainability and life span of these products. More lavatories now incorporate materials made of natural and recycled materials - many of which are GREENGUARD-certified.

A new durable and sustainable natural material available for lavatories is a moulded natural quartz material that can be sculpted into a range of attractive design options. Composed of an eco-friendly resin made of soy and corn, natural quartz is virtually maintenance-free, since it does not require sealing, buffing or reconditioning like granite. Its smooth, seamless finish has a non-porous surface, so it does not support microbial growth and is easy to clean.

Solid surface lavatory countertops made of recycled materials and rapidly renewable material also help ensure long-term durability, and ease of cleaning. Solid surface resists

stains, chemicals, scratches and heat, which reduces the likelihood of repairs and the need for replacements. Surface marks and scratches are repaired easily with everyday cleaners or fine-grit abrasives. The integrated bowl design also eliminates crevices for microbes to hide and further helps prevent the spread of germs.

### touchless fixtures

Today's health conscious end-users show a high preference for hands-free products to minimize germy touch points in commercial restrooms. A 2013 Bradley Corp. survey about hand washing behaviour reveals that people go to great lengths to avoid touching germs in public restrooms. Survey respondents admit to operating the toilet flusher with their foot (64 per cent); using a paper towel when touching the restroom door (60 per cent) and faucet handles (37 per cent); and opening and closing doors with their hip (48 per cent).

In addition to reducing the transmission of germs and bacteria from users' hands, touchless fixtures can also promote hygiene in the overall facility as users leave the restroom area and enter other parts of the building, while being user friendly and convenient to use.

Touchless fixtures also help staff keep restroom elements in good working condition. The "hands-free" design reduces wear and tear from usage, and helps deter vandalism attempts such as leaving a faucet running to overflow in the restroom. Sensored faucets prevent excess water spills with an automatic shut off.

Water on floors is a serious safety issue for building management. The Center for Disease Control and Prevention, reports that every year more than 234,000 people end up in emergency rooms because of injuries like slips and falls in washrooms. Newer lavatory fixtures use design features to minimize water splashing on the floor, such as a completely touchless allin-one hand washing unit that provides a sink, soap, faucet and hand dryer all in one station, so that users don't need to walk with dripping wet hands in search of a towel or hand dryer.

# conserving water and paper

Some of the newest generation hand washing fixtures incorporate hands-free infrared 0.38 gpm faucets that reduce water usage by 24 per cent over 0.5 gpm faucets, and even more in buildings that use 1.0 gpm or more. These low-flow fixtures offer facilities appreciable long-term operational and environmental benefits, saving thousands of gallons of water annually, as well as consuming less hot water than traditional commercial faucets.

High-speed touchless hand dryers help promote hand-drying with the hygienic benefits but without excess paper waste and expense, and extra maintenance. Newer models are also highly energy efficient, as they use 80 per cent less electricity than other hand dryers, while drying hands in as little as 10-12 seconds.

### ensure long-term investment

Smart restroom fixtures will pay back over time in a number of ways. The water and energy saving features minimize utility and operating costs, and the improved washing, hygiene, safety and convenience aspects make a healthier restroom environment. Durable product design translates to less upkeep and maintenance, saving costs on repairs and replacement parts, and allows staff to focus on other duties. In all, today's commercial restroom design innovations promote lasting durability, efficiency and cleanliness.

Kris Alderson, LEED AP, is a senior marketing manager for Bradley Corporation of Menomonee Falls, Wis., a USGBC member and manufacturer of locker room products, plumbing fixtures, washroom accessories, partitions and emergency fixtures. www.bradleycorp.com.