



A New Era for Restroom Wellness

The role of doors and partitions in healthy restroom environments.

BY ALAN GETTELMAN

The COVID-19 pandemic has changed design expectations for commercial buildings.

During the past year, new design strategies emerged as best practices to help mitigate health risks and promote patron safety. Design and facilities professionals now consistently consider how patrons gather in shared spaces – and, specifically, how they enter and exit them.



Increased-height toilet cubicle doors and panels can help maximize the physical barrier between users.

provide privacy and support hygienic design, which are increasingly valued in North American markets.

They help guide the user's path into and through the restroom. They frequently serve as mounting points for amenities needed to ensure a safe, smooth experience.

Restroom doors and partitions represent the confluence of several long-term design trends and emerging best practices in healthy public space design.

Reducing Touch Points

According to new research conducted by Bobrick, hygiene is of the utmost importance to both architects and facilities professionals. A March 2021 survey of more than 300 architects and facilities professionals revealed restrooms are the only building area that ranked in the top two areas of concern for both groups.

In addition, 70% of architects and 92% of facilities professionals say hygiene is "extremely important" to their clientele.

The research also revealed that architects and facility managers see "touch point reduction" as a top concern in restrooms.

Entry and Exit Doors

In most restrooms, entry and exit doors present two potential touch points on the door handles. Several strategies can be employed to help mitigate this risk.

First, entry and exit doors can be removed if privacy is not compromised. This helps eliminate germ transfer points on door handles and can help provide a larger opening for patrons to enter and exit the restroom while maintaining physical distancing. Entrances and exits should always be laid out to minimize congestion and to support universal access.

If doors are a design requirement, a few solutions are emerging. Personal antiviral touch keys can support a touchless entry experience. Self-cleaning touch-point skins can be installed on door handles and push bars. Hands-free door pulls also are available. As a higher investment solution, hands-free, electronic sensor-operated door openers can be utilized.

Commercial restrooms in particular pose unique design challenges in today's COVID-19-conscious world. Respiratory droplets can be spread easily within 3 to 5 feet. Transmission of viruses or bacteria can occur from person to person or via surface contamination. Poor air circulation can exacerbate potential risks.

Restrooms can be crowded, enclosed spaces with multiple people touching numerous surfaces throughout the day. These multiple touch points must also be cleaned every day.

Doors and partitions have always played a critical role in restroom design and function. They

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Commercial restrooms have become a focus area for both design and facility professionals over the past year.

Partitions and Cubicles

Toilet partition doors are another potential concern. Some newer toilet compartment door latches can operate without using fingers to grasp the latch.

This hardware enhancement allows users to both secure and unlock the door with a quick flick of the wrist, forearm or elbow. The hands-free, L-shaped latch/handle can be used on newly



Antimicrobial copper, sometimes used on toilet compartment door latches, is one of the most effective touch surface materials.

designed toilet compartments or retrofitted on existing compartments to reduce contact with shared surfaces.

Some manufacturers may offer toilet compartment door handles and latches utilizing antimicrobial copper, which also address toilet compartment entry touch points. Antimicrobial copper is one of the most effective touch surface materials, killing more than 99.9% of bacteria.

If antimicrobial materials or hands-free door hardware cannot be used, which may often be the case due to budget considerations, maintenance staff will find that any nonporous surface is going to be easier to effectively clean and disinfect. This also applies to the entry and exit door materials and toilet partition door substrate materials.

Health and Wellness Amenities

In many cases, it simply may not be feasible to remove entry and exit doors or provide hands-free or antimicrobial toilet partition door hardware. In this situation, it may be prudent to ensure restroom accessories support effective hand hygiene to help mitigate any risks from restroom door touch points.

Many patrons prefer to grab a door handle using a paper towel as they exit the restroom. It can be thoughtful to provide a paper towel dispenser

and waste receptacle near the exit for convenient towel disposal.

Lavatory areas should utilize touchless soap dispensers, faucets and hand-drying accessories, such as paper towel dispensers, to ensure patrons are exiting the restroom with clean hands.

Using top-fill soap dispensers that accept nonproprietary, or bulk soap, can also help facilities keep soap dispensers full. Proprietary cartridge soap systems are more labor intensive to fill, and closed-system cartridges may be more prone to supply chain interruptions.

Additional amenities can be provided inside toilet compartments to help minimize germ transfer on hardware that patrons use to exit. To address shared surfaces, such as grab bars and toilet compartment door handles, toilet compartment interiors can include a hand sanitizer dispenser, paper towel dispenser and a waste disposal to



Hands-free toilet compartment door latches can help reduce restroom touch points.

ensure optimal hand hygiene while inside and exiting the compartment – similar to entering and exiting the restroom.

Personal device holders are also available to help keep personal belongings off potentially wet or unsanitary floors.

Height and Privacy

In recent years, cultural issues have contributed to restroom privacy becoming a top consideration in restroom design. Today, virtually all toilet partition manufacturers offer privacy partitions and cubicles incorporating increased-height doors and panels.

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Effective occupancy signaling can help users maintain comfortable distancing while supporting privacy.

During the COVID-19 pandemic, partitions and plexiglass divider panels emerged as a popular design solution for a variety of shared spaces, from grocery store checkouts to offices, to help support physical distancing and minimize the spread of respiratory droplets. In the restroom, this mindset can support patron wellness and peace of mind while also meeting new privacy expectations.

Standard toilet partition doors and panels are 58 inches tall with 12 inches of floor clearance. To help maximize the physical barrier between users, toilet compartment panels, doors and urinal screens can be increased to a minimum of 84 inches high and extended to within 3 inches of the floor.

Privacy options available on a given toilet partition or cubicle system may depend on the substrate material. Designers, facility managers, and door and hardware professionals should consult with their manufacturer to determine the privacy possibilities for their projects and buildings.

Elevated toilet partition and cubicle design is another emerging trend that has evolved in concert with new privacy expectations. Today, manufacturers typically offer expansive ranges of colors, finishes and patterns with their respective substrate materials to be used on doors and divider panels. Specifying the right solution will

require balancing the restroom's unique health and wellness needs with privacy and design expectations.

Occupancy Signaling

Effective occupancy signaling can help users maintain comfortable distancing while supporting privacy, as using adjoining toilet compartments can be avoided. While occupancy indicators are an established feature on today's toilet compartment doors, especially with high-privacy cubicles, new solutions have been developed.

In addition to standard occupancy indicators integrated into the door and latch hardware, automatic external occupancy indicators are available. These can be mounted on compartment stiles with left or right hinges and with doors that swing in or out. It provides a cost-effective solution for existing or new toilet compartments.

As a higher-end solution, LED indicators are also available, which eliminate the need for conventional lock indicators and support a more elevated design experience.

Conclusion

Restrooms are a central hub in public buildings with many users sharing the same space, breathing the same air and touching many surfaces throughout the day. Even in normal times, doors and partitions play a key role in any restroom.

In designing restrooms for a post-COVID-19 world, restroom doors and partitions should be evaluated from the perspectives of all restroom stakeholders – from patrons to facility operators to building owners. This will help architects, facility managers, door and hardware professionals, and their clients build more effective working relationships that result in cleaner, safer restrooms. +



LED occupancy indicators are a higher-end solution that replace conventional lock indicators.



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