

BY MARK TRIER

*New products, technology + best practices reflect latest trends in healthcare restroom design*

# RIGHT COMBINATION



## RESTROOM TRENDS

(above) Warm colors in this healthcare restroom reflect latest trends in interior design.

New technology, combined with improved safety measures, lead the way in discussing today's latest trends in healthcare restroom design. Equally important is patient demand for warm interior finishes, mimicking home environments of natural products and organic earth tones. Both public and private patient room toilets receive a high degree of scrutiny in the design phase by healthcare administrators, environmental cleaning staff and design professionals.

It is everyone's desire to eliminate the transfer of healthcare-acquired infections. The Centers for Disease Control and Prevention reports that hospitals in the U.S. have recorded slightly fewer than 2 million HAIs each year. This staggering number illustrates why the healthcare industry product manufacturers have concentrated efforts on reducing infections through new antimicrobial technology.

Recent product development is more proactive in that it kills or reduces the

infectivity of microbes. One such material is copper-based alloys that kill surface pathogens within two hours of exposure. It is available on a variety of building products, including automatic push buttons, door handles, grab bars, sinks and faucets.

JRA Architects recently used one of these surface materials on grab bars and sinks at the University of Louisville Brown Cancer Center Bone Marrow Transplantation Unit. Mike Nett, AIA, JRA's principal-in-charge, said, "This was the first facility in the Kentuckiana region to use this technology."

University of Louisville Hospital Director of Infection Prevention Sarah Bishop, A.P.R.N., adds, "Incorporating new technology shows our commitment to providing a safe environment for patient care."

The following takes a deeper dive into today's latest trends in healthcare restrooms.

**Focus on surfaces + materials**  
Microbicidal additives have also been developed for paint. Product data shows the proprietary additives are up to 90% effective in killing certain types of bacteria for up to four years. Painted wall surfaces and especially restroom entrance doorframes should be specified to use this paint to reduce HAIs.

Hard surfaces, such as tile, are common in restrooms and do not need an additive. Hard surface materials (especially porcelain) are highly inert and absorb very little water. However, in detailing these areas, specify that the antimicrobial grout needs to be struck flush with tile edges, thus reducing spaces for germs to accumulate. Other

RESTROOMS continued page 16 >>





For more information on these products, visit [mcdmag.com/products](http://mcdmag.com/products).



### Wireless Power Solution Delivers Continuous Energy to Connected Restrooms

Healthcare public restrooms can have numerous battery-operated devices: soap dispensers, touchless faucets, flush valves and more. These batteries provide an ongoing maintenance and service level concern, and their disposal can also be an environmental hazard.

Wi-Charge long-range wireless power delivers continuous energy to those devices so that batteries never need to be replaced. Wireless power also opens the door to enhanced functionality to improve availability and efficiency. Additionally, long-range wireless power allows consumers to quickly upgrade their restrooms to the latest smart technology while avoiding expensive renovations. **ID#100**

### Solid-Surface Transfer Shower Resists Growth of Mold, Mildew & Bacteria

BioPrism Solid Surface from Inpro is an excellent choice for patient shower enclosure material. Since solid surface is non-porous, it does not promote the growth of mold and mildew and resists bacterial growth.

Solid surface offers a great alternative to tile – no grout to trap mold and mildew. Where grout cracks or falls out, there is risk of water getting behind the tile leading to tiles failing or moisture seeping into the gypsum board or other substrate. Transfer shower bases are designed to accommodate easy transfer from a wheelchair into the shower. When it comes to creating a universally accessible shower, transfer bases not only provide the necessary compliance, but are engineered by experts for optimal usability, easy installation and low maintenance, making it a great solution overall. **ID#101**



### Integrated Sink System Customizable for Healthcare Restroom Applications

The D|13 Integrated Sink System featuring the XleratorSync Hand Dryer from Excel Dryer elevates the hygienic healthcare restroom experience to an artform. The system combines a sink, soap dispenser and high-speed, energy-efficient hand dryer into one customizable, visually striking restroom solution. In addition, the system features automatic sensors for hands-free, no-touch operation. XleratorSync features adjustable speed, sound and heat controls, HEPA filtration and a sound suppression air delivery system. The dryer uses “reverse airflow” design to blow both air and water flow away from the user. Beautiful and hygienic, the system perfectly complements any healthcare facility’s restroom. **ID#102**

>> RESTROOMS continued from 15

materials, such as shower and privacy curtains, should also be specified with antimicrobial treatment. Even toilet fixtures are now available with an antimicrobial coating.

#### Focus on technology

Preventing the transfer of germs to surfaces is always the best way to prevent the spread of HAIs. Touch-free faucets and automatic flush valves on toilets are now standard practice in public restrooms, and gaining popularity in private patient rooms. Newer technology

on faucets provides lighted displays that guide the user through the CDC’s three-step recommendation for proper hand-washing. Antimicrobial pressure-compensating laminar flow non-aerating lavatory faucets are another example of how new technology encourages the fight against the spread of infection.

#### Focus on safety

Improving patient safety measures is also an important goal in today’s restroom design. Several design trends and products can assist in accident prevention. Errant water from patient showers pose a slip and fall risk. This risk increases in the

layout of wheelchair-accessible showers since no standard curb is allowed.

Today’s designers now have the ability to specify a continuous water drain that lines the shower entrance from wall to wall. This works well unless a flexible showerhead is diverted in the wrong direction. Therefore, best practices recommend including a second floor drain within the restroom walls. The flooring shall slope 1/8 inch per foot to each drain to avoid standing water. This is sometimes difficult with large-format tile, so current trends reflect the smaller 2-inch by 2-inch pieces. In addition, specifying a square floor drain better



### SAFETY & STYLE

(right) Copper alloy-coated surfaces used for sinks and grab bars help reduce the spread of infection.

accommodates the tile setter, allowing for square cuts adjacent to the metal strainer.

### Focus on hospitality aesthetic

Infection control products need to be skillfully integrated into the space by the design professional to produce a healing and calming interior. More than ever, interior designers are taking a hospitality aesthetic approach for their healthcare environments. Ashley Meeks, KYCID and EDAC certified interior designer, says today's design trend is using "warm organic materials since the clinical look is no longer the norm."

Porcelain tiles with wood grain or stone imprint have become common materials in restroom walls. Also, residential subway tiles are often used instead of institutional 4-inch by 4-inch tiles. A solid surface countertop with integral bowl is often specified in lieu of a wall-hung china sink. Finally, Meeks recommends patterned shower curtains to help create a holistic healing environment.

Recent advances in LED technology have also provided new products that enhance the patient experience in an energy-efficient manner. Mirrors with integrated lights at the top and sides provide uniform lighting for make-up application and general grooming. The LED is flush with the mirror surface, making cleaning much easier than the standard surface-mounted fixtures. Some models include mirror defoggers, eliminating the need to hand remove by towel the condensation that forms on glass surfaces in high-humidity situations.

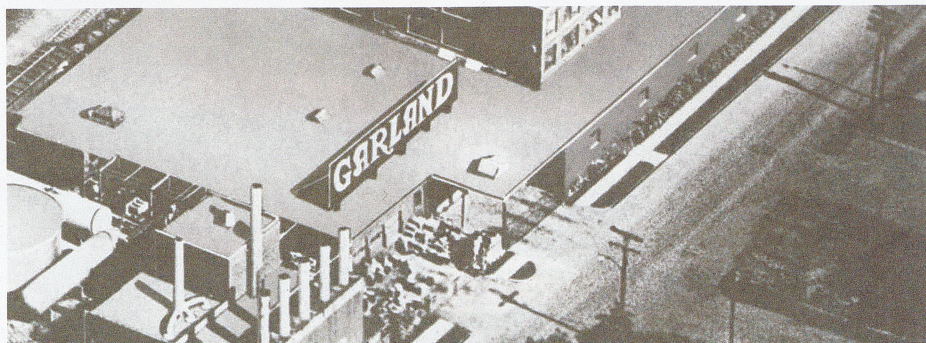
All these new products and best practices make safer and friendlier healthcare restrooms. Finding the right combination is a product of good collaboration between the professional designer, healthcare administrators and



environmental cleaning staff. A full-scale mock-up is an excellent tool to facilitate this collaboration.

Additional design input and approvals can be obtained through critical evaluation by all stakeholders. This exercise flushes out final details by reviewing a real-life installation. It also allows the subcontractors to add their important input to construct a serviceable final product. After all, it is a team effort to produce healthcare restroom designs that reduce the spread of infection, eliminate potential accidents and enhance the user experience through patient-centered design.

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