

Photo courtesy of CRL



Retail and hospitality spaces use up-to-date materials and systems to create spaces designed to draw people in for a positive experience.

# Appealing and Long-Lasting Hospitality and Retail Design

Design doesn't need to suffer in order to achieve performance

Sponsored by ASI Group, Bison Innovative Products, Bradley Corporation, Cascade Architectural, CornellCookson, CRL, Geberit, Inpro, and Louis Poulsen

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Companies that offer hospitality and retail services are seeking the attention and loyalty of their customers, particularly since there are usually many choices available to those customers. As such, hospitality and retail facilities are intended to appeal to a lot of different people, offering both a design challenge and attention to the day-to-day stress placed on those facilities. Therefore, it is incumbent on architects and designers to first create retail and hospitality buildings that help attract

customers and secondly to provide an enduring experience that will hold up over time. That means building materials, products, and systems become important tools in providing the needed high levels of design and long-term durability. In this course, we look at a variety of products, systems, and materials that can be considered by design professionals to help meet all these project requirements. The course is broken down into three sections – building exteriors, building interiors, and restroom design.

## CONTINUING EDUCATION

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### Learning Objectives

After reading this article, you should be able to:

1. Identify and recognize the significance of exterior building designs that promote light, views, and outdoor spaces that improve safety and welfare.
2. Assess the health and safety performance aspects of interior systems in retail and hospitality settings as they relate to durability and sustainability.
3. Explain the importance of enhanced restroom design for health, hygiene, and general welfare as part of a well-designed total building.
4. Determine ways to incorporate the design principles presented into buildings as shown in project examples.

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AIA COURSE #K2206E

**1. BUILDING EXTERIORS  
GLAZING FOR CONNECTIVITY**

Design professionals and business owners have long recognized that glass and glazing designs can have a profound impact on the customer experience in hospitality and retail environments. Transparency, daylighting, and open floorplans have become key factors in attracting customers, improving their interactions, and increasing their loyalty. These factors have also been shown to strengthen occupant morale and doing so often leads to repeat visits.

Recognizing these capabilities, designers have used contemporary glazing systems to raise the appeal of many different types of hospitality and retail establishments. With a wide array of glazing systems at their disposal, architects can design unique and engaging hospitality and retail environments that enhance aesthetics and offer long-term durability. Some examples are summarized as follows:

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**The well-designed use of glazing in retail and hospitality buildings can create uninterrupted indoor/outdoor connections or maintain views that provide windscreen and railing protection.**

- **Restaurants** When it comes to fine dining establishments, an effective way to attract customers and create positive experiences is by designing open spaces, including seamless transitions from indoors to outdoors. This produces engaging, social environments with visual stimulation and bustling energy. One way

Photo courtesy of Here and Now Agency



of doing this is by specifying expansive movable walls. These typically take the form of large-scale sliding and bi-folding doors, which can be easily opened at any time of the day. Newer systems feature minimal frames so there's less visual obstruction thus enhancing the indoor/outdoor connection. When closed, door hinges can be completely concealed to deliver an elegant and streamlined look. Available technology allows larger format doors to be used in heights of up to 13 feet.

- **Stores** In retail spaces, first impressions are everything. That's why designing striking entrance systems that quickly catch the eye is key. This sets an enticing tone for what's to come in the retail shopping experience. Monolithic style glass doors are the way to go here. The taller the doors, the grander the entrance, which is why frameless glass doors that are 12 feet tall are becoming more common. New technologies and fabrication methods allow smooth operation of these heavy glass doors, while new tubular panic devices have been developed that can accommodate these heights.
- **Hotels** Modern hotels often feature balconies and rooftop pools that prioritize views. Glass railing and windscreen systems are ideal in these situations because they give occupants uninterrupted views of often captivating surroundings, thus enhancing their experience. At the same time, they're designed to satisfy code requirements for safety and load performance. Such products combine sophisticated design and definitive safety to deliver a functional and high-performance guardrail that enhances views with minimal visual interruptions. Glass panels can be adjusted to produce precise sightlines

Photo courtesy of Here and Now Agency

**GLAZING PROJECT EXAMPLE**



**Project:** Pendry Hotel & Residences  
**Location:** West Hollywood, California  
**Architect:** EYRC Architects

**The Project:** The new 300,000-square-foot Pendry Hotel & Residences in West Hollywood encompasses a full city block on the famed Sunset Strip. It comprises 149 luxurious guest rooms and 40 expansive private residences.

**The Glazing Design:** EYRC Architects sought to maximize the sweeping views of Los Angeles in all upper-level exterior spaces. To accomplish this, they specified over 3,000 linear feet of glass railings. The system was installed around all balconies and rooftop lounge areas. Using minimal hardware, the glass railing system produces uninterrupted glass spans that let the view take center stage. It was specified with cap rails and laminated glass to further ensure safety and structural performance. Overall, the glass railing systems help to heighten the occupant experience, both visually and functionally.



with a complete selection of handrails and cap rails available. Similarly, glazed windscreen systems are designed to enhance outdoor experiences by combining sought after performance and aesthetic features. Slim front trim and post depths deliver optimized structural performance while producing virtually unobstructed views. No horizontal extrusions are required for support, resulting in striking post-to-post glass spans of up to 5 feet that are capable of handling up to 80 PSF of wind loads. Systems can be specified using 6-, 7-, or 8-foot standard post heights glazed with 9/16" laminated tempered glass.

Recognizing the different glazing options for any of these retail and hospitality settings allows designers to create inviting, durable, and business-enhancing spaces.

**CREATING OUTDOOR SPACES**

Accessing outdoor spaces is desirable in retail and hospitality settings because it is appealing to guests, potentially profitable, and sustainable. Outdoor spaces allow owners to bring more guests to their venue, whether for events or day-to-day activities, meaning more potential business. The key is to have a usable, durable, deck or outdoor floor surface that can be fit into the available space, look good, and provide a safe and secure surface.

The answer to these design challenges is often found in modular deck systems that are supported by adjustable pedestals. Such systems give architects the design flexibility to create unique and beautiful outdoor spaces, either on a rooftop, on the ground, or in unclaimed space to create a "Pop-up Park." Adjustable deck systems that incorporate three types of components are commonly available.

- **Deck Supports** High-density polypropylene plastic that is 100 percent recyclable is a common material to make the adjustable deck supports from. This makes them impervious to water, mold, and freeze-thaw cycles. Their adjustability offers tremendous design flexibility compared to traditional deck building materials and methods and provides one of the most labor- and cost-efficient methods of creating a flat, level deck over a sloped surface. As a gravity system, the supports do not penetrate but rather protect roofing and waterproofing



Photos courtesy of Bison Innovative Products

**Creative, appealing, outdoor spaces can be created on rooftops or as "Pop-up Parks" using adjustable height pedestals and modular deck products.**

membranes, thus causing no damage or harm to the surface below. Adjustable pedestal systems can support decks over occupied space, allowing space for electrical systems, duct work, and irrigation. Pedestal systems are available in a range of heights and weight bearing capacities to suit a variety of applications.

- **Deck Surfaces** Deck supports are designed to elevate a variety of surfaces, including granite or concrete pavers, wood tiles, composite materials, or fiberglass grating. Any modular deck

surface material can be removed for routine maintenance, for repairs to the roof, or to gain access to other systems. Wood tiles are particularly popular for their light weight, ease of workability, and attractive appearance. Wood tiles can be laid in a parquet or linear pattern, or mixed with pavers, river rock, stone, plank decking, or other options to create unique aesthetics. If maintaining the wood color is desired, wood tiles can be periodically cleaned and sealed. Left to weather naturally, the wood tiles will

Photos courtesy of Bison Innovative Products

**OUTDOOR SPACE PROJECT EXAMPLE**



**Project:** Loews Chicago Downtown Hotel  
**Location:** Chicago, Illinois  
**Architect:** Solomon Cordwell Buenz  
**Developer:** DRW Holdings

**The Project:** Located in the heart of Chicago, the luxurious Loews Chicago Downtown Hotel is situated steps from Navy Pier, offers guests spectacular city skyline and lake views, and is ideally located near Magnificent Mile. The unbeatable downtown city location is the perfect option for business, leisure, and family travel.

**The Outdoor Space:** This distinctive and sophisticated hotel offers guests a rooftop lounge ideal for dining, relaxing, business meetings, and special events such as weddings. The expansive rooftop deck was constructed using adjustable height pedestals supporting concrete pavers. The rooftop is complete with a green roof and areas dedicated to lounging, relaxing, and dining.

Photo courtesy of Cascade Architectural



In hospitality and retail settings, coiled wire fabric is used as an interior visual design element, an energy-saving sunscreen on windows, or a security gate that does not obstruct visibility into the retail space.

Photo courtesy of Cascade Architectural

### COILED WIRE FABRIC IN PROJECTS



When selecting a coiled wire fabric system for a hospitality or retail project, there are a lot of different choices in the details of how it can be specified, as follows.

- **Material Makeup** The base metal wire can be steel, aluminum, brass, copper, or stainless steel. The choice of the wire material and its gauge impact the weight, functionality, and aesthetics of the final fabric. The base metal, wire gauge, weave pattern, and finish can be altered to suit the needed strength, rigidity, and appearance of the coiled wire fabric.
- **Light Transparency** Coiled wire fabric will allow light to pass through, but how much and how visually transparent it appears will be based directly on the specified make-up of a particular fabric. Those with thicker wires and tighter weaves will obviously allow less light than those with thinner wires and more open weaves.
- **Formability** Coiled wire fabric is free flowing and flexible, meaning it can be formed and shaped to create undulating or curved surfaces, flat taut surfaces, or a combination of any of these. That allows for a high degree of creativity in how spaces are defined and articulated, both for walls and ceilings.
- **Color** Coiled wire fabric is available in either a natural, uncoated state or with resilient powder-coating finishes for a sharp, long-lasting aesthetic. The color choices are broad, allowing it to be a successful part of virtually any design scheme. Further, the finishes can be specified to match any RAL color code or specified to comply with Declare labels from the International Living Future Institute to protect human health when used on interiors.
- **Performance Traits** It can be used for light diffusion or shading to enhance or control the ambient lighting of a space. It also serves very nicely as a surface to receive nighttime lighting. In appropriate strengths, it can provide partitioning for safety, fall protection, blast mitigation, and security.
- **Cost Effectiveness** Compared to the full construction of rigid partitions or other separation elements, coiled wire fabric is a very affordable option. It is also more economical than commercial woven wire mesh that is typically designed for other purposes.

Designers who recognize the innovative uses of this product and its green building traits can achieve successful outcomes in hospitality and retail settings.

develop a silvery-gray patina.

- **Site Furnishings** Manufacturers of pedestal deck systems also offer coordinated, modular elements that are designed to integrate with their deck systems while giving the architect complete design flexibility. Modular cubes for example, made from high-strength aluminum or ipé in an array of colors and finishes, can serve as planters or can include a top for seating and/or storage. Cubes commonly have drain holes and irrigation sleeves that make caring for plants or vegetables convenient and hassle free. Storage can be used for seasonal items like cushions or throw pillows. Similarly, aluminum rock trays that are lightweight and durable add dimension and texture to deck areas. Deck designs can even include recessed lighting to enhance the ambiance of the environment while improving visibility and safety during nighttime or other dark conditions.

Overall, pedestal deck systems create valuable, usable outdoor space for both owners and their clients, customers, and visitors. Rooftop decks are a way for hospitality or retail spaces to differentiate themselves from the competition.

### 2. BUILDING INTERIORS SPACE SEPARATION AND CONNECTIONS

In hospitality and retail settings there may be a need to provide a degree of separation between different spaces without the use of a solid wall or partition. In fact, it may even be desirable to provide some controlled connectivity between spaces for visibility, airflow, sound, or other reasons. Several different products have been used to achieve this effect, particularly in interiors, but an emerging, innovative choice is the use of a coiled wire fabric. Such products are different from traditional metal mesh materials in that they are designed as architectural products for use in a variety of ways.

Coiled wire fabric is a durable, thin material that is lighter in weight than traditional wire mesh and offers more design flexibility. For interiors, architects and designers can use coiled wire fabric for curtains, ceiling treatments, wall coverings, security gates, and even as complete partitions, all adding elegance and purpose to the spaces where they are used. On hospitality and retail exteriors, it can be used for sun shading, security protection, resilience enhancements, or aesthetic facade treatments. It is available

with a range of attachment systems allowing for different building conditions and finish treatments. The material can be left to hang (i.e., flowing freely) or it can be secured at both the top and bottom and pulled taut to create a semi-rigid condition. Because of its fabric nature, curved and undulating shapes are easily achieved providing interiors with more character and vitality than rectilinear shapes alone.

From a performance standpoint, coiled wire fabric can be used for light diffusion to further enhance the interior ambient lighting of a space. In appropriate strengths, it can provide partitioning for safety, fall protection, blast mitigation, and security. Further, if there is an interest in extending its use to the exterior, the material is durable enough to withstand those rigors as well.

Coiled wire fabric can contribute to green building design in several ways. It has been tested and shown to be an easy and attractive way to save on air conditioning costs by limiting the amount of sunlight that enters the building. Uniquely, the metal fabric does not block views to the outside like typical window curtains do. For retrofit applications where advanced high-performance glazing has not been installed, coiled wire fabric systems can be especially effective.

As a material made from metal, coiled wire fabric is a durable product with a long service life. It can contain recycled content and is 100 percent recyclable when it is removed from service. When used on building interiors, it is worth noting that no toxic chemicals are used in the material's manufacturing process. Some even carry Declare labels from the International Living Future Institute indicating the degree to which human health and the environment are protected by the products.

**ROLL-UP SECURITY GRILLES**

While retail and hospitality venues want to welcome in customers when they are open,



Aesthetic, well-designed roll-up security grilles can be used in a variety of locations to protect interior spaces from each other or from unauthorized exterior entry.

Photo courtesy of CornellCookson

**SECURITY GRILLE PROJECT EXAMPLE**



**Project:** Marriott Hotel  
**Location:** West Des Moines, Iowa

**The Project:** The Marriott in West Des Moines, Iowa, seeks to elevate visitors' travels with a seamless blend of high-tech and high-touch service. This includes elevating the visitor experience through renovations and building updates along with enhanced services such as complimentary shuttles and spacious guest rooms with pillowtop mattresses. Always looking to modernize and renew their spaces, the Marriott decided to renovate the main lobby, entrance areas, and common areas in 2018, including the very visible lobby bar.

**The Security Grille:** A custom wood 'cloud' drape (baffles) is situated over the bar and created the preferred aesthetic. The goal was to match that look with a polished, high-end look while providing the necessary security to make it a showpiece bar area. The selected roll-up grille complements the custom millwork above and behind the bar. It was coordinated closely with the carpentry to make sure the grille's guides synced up to the millwork and accounted for the grille's electrical components. The grille was also customized to fit the size of the cabinet fabricated by a custom carpentry shop. The metal mesh grille provided the Marriott with an extremely customizable option: the woven pattern offers superior strength while still allowing airflow and visibility.

they also have a need for security outside of scheduled hours. However, integrating a closure into a design to provide that security doesn't mean that aesthetics needs to take a back seat to function. Rather, there are plenty of options available that are quite effective at meeting stringent security needs while still allowing architects the freedom to create excellent designs or even introduce focal

points. Some available options include the following:

- **Security Grilles** This style of product can be used for full-height or counter-height openings and is particularly well suited for large openings, such as a mall storefront or even the exterior covering of a display window. They can also be used

Photo courtesy of CornellCookson



Photo courtesy of Inpro



Printed wall protection can be incorporated into retail spaces buildings using large-scale graphics back printed on clear wall-protection sheets.

Photo courtesy of Inpro



An elevator renovation at the Best Western Hotel in Portage, Wisconsin, completes the interior design of the building and offers opportunities to make a positive first impression.

to secure a service or food counter from the counter height up to the top of the opening. Either way, the grille patterns provide superior strength while allowing airflow and visibility. Security grilles and counter doors are typically custom fabricated to meet project-specific designs and specifications. Materials include stainless steel, aluminum, or powder-coated steel, offering a full range of finished looks and colors. Their installation in new construction or an existing business is straightforward, usually without requiring any structural modifications.

- **High-Security Doors** Retail businesses have become sensitive to the need to protect against riot activity and even crowd pressure, whether on the exterior or interior of a building. As such, new product offerings are available that are a

step above a standard 18-gauge heavy-duty rolling door but does not quite reach the level of security and cost of the heaviest-duty industrial doors. Such roll-up doors are extremely versatile, making them ideal for any storefront or back of house application. They are available in standard finishes in addition to numerous powder-coat colors to provide a suitable aesthetic.

As an added aesthetic option, security doors can use visual art such as logos, graphics, and other images, printed directly onto the door to showcase vibrant full-color designs. Further, if transparency is desired, then perforated slat doors are an option, which allows for visibility but also enhances security.

In this case, there are at least three options including:

- **Aesthetic Conceal** This model features durable aluminum guides set into the wall for a hidden look. There will be a visible stainless-steel bar running across the bottom of the grille.
- **Aesthetic Reveal** This model features visible, stainless-steel guides along the sides and a stainless-steel bottom bar for a polished look, adding decorative appeal to an entryway.
- **Service Mesh** This model fits in purely practical application areas (e.g., loading docks, storage rooms, etc.) delivering a cost-effective security solution while keeping all the advantages of the design.

Looking at the different visual options combined with the appropriate security level allows design professionals great freedom to create attractive, secure, spaces.

**PRINTED WALL PROTECTION**

In the interest of making retail spaces more engaging and appealing, whole-wall imagery or large-scale graphics are being used to create inspiring designs. But that imagery needs to hold up over time, particularly in high-use retail applications. That is now possible using printed wall protection products that combine high-resolution images with durable wall protection. Along with truly endless design capabilities, this approach also provides high-impact durability to wall surfaces. Since the graphic is back printed on a clear protective sheet, there is no worry about the image being scratched over time. That means high-resolution photographs, artwork, or any other graphic can be printed and incorporated onto as large a wall space as a design may call for.

**ELEVATOR INTERIOR RENOVATION**

Among the most used interior spaces in a hospitality setting are the elevator cabs which can become a daily ambassador of the message or branding of the building. However, these cabs are subject to deterioration and damage precisely because of their heavy use. Therefore, the elevator cabs need to be upgraded regularly either to overcome a worn and unsightly appearance or to simply upgrade the look to be consistent with the organization or other parts of the building.

The most cost-effective and innovative way to carry out such an elevator cab upgrade is to use preconfigured elevator cab renovation systems from a manufacturer that has a specialty line of products to address

these needs. This system can include any or all the following elements.

- **New Panels:** The elevator panels that line the walls are what primarily make up the appearance of the cab. These panels also typically take quite a beating - from luggage carts, suitcases, service work, etc. Replacement panels can be made of durable and rugged materials, with the appearance of wood, metal, stone, or custom choices.
- **New ceilings and lighting:** Elevator ceilings come in many different styles and can be selected to suit an overall design concept. Lighting in elevator cabs can be chosen from among common lamping options such as halogen, incandescent, fluorescent, or energy-efficient LED.



Pendant style lighting can be arranged in clusters or along a linear system, with varied lamps and globes to create different lighting conditions.

Keep in mind that people tend to be more comfortable in a well-lit interior, so combining a brighter ceiling with increased lighting output can help people



Photo courtesy of Louis Poulsen

Photo courtesy of Louis Poulsen

## LIGHTING DESIGN IN PROJECTS



The design of pendant style lighting requires attention to the light distribution and the elements of the fixture.

When designing with electrical lighting, it can be useful to hear directly from the companies that manufacture and create the fixtures being used. For example, designers may choose to use pendant lighting systems in a particular hospitality or retail project. They may be seeking to direct most of the light downward onto tables underneath the installation, where it's needed. At the same time, an opening on the top of each pendant can give out some light to illuminate the ceiling, thus creating a warm ambiance and highlighting the architecture of the space.

Lighting designer Lars Larsen of Kilo Design reflects on the creation of a pendant style lighting fixture system that is intended to provide this dual lighting capability. "The design was inspired by the iconic pendants that are suspended within the system. The system's structures and transitions take cues from the design language of the manufacturer. It was very important for us to create a system that would complement and feel familiar when used together with the pendants."

The other aspect of the lighting fixture design is the ability for architects or others to arrange and customize the final installation. "Flexibility has been crucial in the design to enable users to create their own clusters or settings. It's all about the lamps and we've tried to create a framework for the pendants that's basically an enabler for customization and creativity."

feel more relaxed inside not to mention creating a newer and cleaner look.

- **New Handrails:** Handrails in elevators get attention for ADA or accessibility code requirements but they also provide stability for users (i.e., something to grasp) while the elevator stops and starts. This is particularly true for elderly, disabled, or injured people who need help to reduce the risk of a fall. Beyond the people aspect of handrails, they provide a means for a complete look to the cab and can act as a wall guard, too.

Paying attention to both the appearance and durability of elevator cabs can clearly pay off in terms of creating successful, innovative interiors.

### APPEALING ELECTRICAL LIGHTING

The attraction of interior spaces is directly influenced by the lighting within those spaces. When natural daylighting isn't available, either because of time of day or the location of a space within the building, then electrical lighting design becomes paramount not only for the utility of being able to see, but to create the total experience of the space. There are, of course, many different approaches that have been used in retail and hospitality settings, but we will focus here on a Scandinavian concept that is based on creating an "island of light" that can be indirect, soft, and inviting.

One way to achieve this type of lighting is to use pendant style fixtures. This approach is quite versatile with different types, sizes, colors, and shapes of pendant fixtures that can hang down in a variety of ways. It can also be very versatile in the way that light is either diffused or directed onto adjacent walls, floors, tables, counters, etc. The net effect can be artistic unto itself in terms of the light fixture but also in terms of the lighting effects that

Photo courtesy of Bradley Corporation



Consumer surveys in 2022 show that Americans are concerned about germs and hygiene, particularly in retail and hospitality settings.

are possible. This technique can also save on the amount of energy used by directing light to where it's needed instead of adopting a lighting solution of high ceiling lights, illuminating the whole space with one layer of lighting.

There are two common approaches when this type of pendant lighting is used in hospitality and retail projects.

- Cluster Pendants** The arrangement of pendant fixtures into a pattern or a cluster provides the opportunity to focus light where it's needed while the fixture can make its own statement. For example, clustering sphere-shaped glass fixtures that diffuse light can create a desired ambiance in the immediate surrounding areas. This can help accent a particular space and draw people in to gather or for some other experience. Fixtures of this type can provide uniform, general, and diffuse illumination, with the quality of the glass ensuring that the fixture is evenly lit. In some cases, an opening at the bottom of the glass sphere can produce downward directed light which can create multiple pools of light on a surface below.
- Linear Pendants** When people gather around a table for eating, drinking, or just socializing, pendant light fixtures can be used to create some very deliberate lighting effects. For example, a linear arrangement of conical-shaped fixtures with a matte, white-painted inside helps assure even distribution of a soft,

comfortable downlight across a table. If there is an opening at the top of the fixture, that can provide decorative illumination of the pendant support above or general ambient lighting. The linear pendant support itself ensures that the fixture retains the full expression of its visual shape, both when illuminated and when switched off. Overall, as evening approaches, the diverse, task-focused lights work together to illuminate their designated spaces.

Combining the artistic aspects of pendant lighting fixtures with their diverse lighting capabilities offers designers a vibrant tool for restaurants, hotels, and other spaces.

### 3. RESTROOM DESIGN DESIGNING FOR HYGIENE

Providing attentive restroom design in hospitality and retail environments provides several benefits to facility stakeholders, including guests, staff, and businesses. Those benefits range from infection control/hygiene, restroom functionality, long-term durability, improved maintenance, elevated aesthetics, consumer satisfaction, greater user privacy, and business return on investment.

Restrooms and plumbing systems in retail and hospitality businesses have rarely been under as much scrutiny as they are right now. Management might expect more inquiries from patrons leery of infection prevention measures in restrooms. With that in mind, there are several things that designers should

be aware of including the following.

#### Consumer Concerns

Ongoing industry surveys about customer/guest germ concerns, public restroom usage, and handwashing habits indicate that the recent pandemic has greatly impacted the perceptions – and reputations – of hospitality venues and retailers. The most recent survey, conducted in January 2022, revealed that almost 80 percent of Americans continue to be in an elevated state of germ consciousness, triggered by the coronavirus. Also, certain types of facilities cause more trepidation about coming into contact with germs. In fact, Americans are most concerned about germs in retail/stores (50 percent), medical facilities (39 percent), restaurants (34 percent), and gas stations (28 percent).

Surveys also indicate that Americans are willing to put their money behind restroom cleanliness. Almost 60 percent say they are likely to spend more cash at a business with clean, well-maintained restrooms. Another 58 percent say when out running errands, they'll take restroom breaks at a business they know has "good" restrooms. Men are especially likely to show preferential treatment based on restroom appearances, as are Millennials and Gen Xers.

Conversely, there is a business blowback from retail and hospitality restrooms that are unclean or in disarray. Surveys indicate that 51 percent of Americans say an unpleasant public restroom at a business shows poor management, up from 39 percent in 2021. Close to 60 percent of respondents will leave the business immediately or unlikely to return after encountering an unpleasant restroom.

#### High Demand for Touchless Technology

One recognized means to help address some of the consumer concerns related to hygiene and convenience is the use touchless bathroom fixtures – fixtures that use sensors to turn water, soap, or hand drying on instead of using our hands to do it. Touchless benefits like minimizing germs, cleanliness, user convenience, and ease of maintenance have always resonated with people. But the coronavirus pandemic accelerated demand for touchless technology fixtures, making them the new gold standard in restrooms. Not only do they eliminate a possible point of germ transfer, but they are also easier to keep clean, maintain, and service than manually activated fixtures.



Survey results from 2022 showed that Americans view touch-free technology as the number one feature that makes them feel safer from germs in restrooms. A whopping 84 percent of American adults think it's important that commercial restrooms be equipped with touchless fixtures. Further, 63 percent say they are more likely to return to a business that offers no-touch capabilities in its restrooms. The top most important touchless restroom features are faucets, soap dispensers, flushers, and restroom entrance doors.

Good restroom design has clearly evolved to include the use of touchless technology in restaurants, hotels, stores, and similar facilities with many architects and designers expecting to see an increase in demands from clients for touchless fixtures.

**IMPROVED TOILET INSTALLATIONS**

It is clear that sanitation, safety, and sustainability have become and will remain important considerations for guests and clients alike for hospitality and retail design,



Photo courtesy of Geberit

The use of in-wall toilet systems improves the overall aesthetic of retail and hospitality restrooms and also brings notable performance benefits.

especially regarding the facilities' restrooms. Meeting those objectives includes maintaining control over the amount of water used in public restrooms and hotel rooms. According to the U.S. Environmental Protection Agency (EPA), 15 percent of the water used in commercial buildings comes from hotels and other lodging facilities. They further point out that the highest percentage (30 percent) of that use comes from domestic and restroom use.

Based on these data, one common design goal in restrooms is to control the amount of water used. This is particularly true for flushable toilets where the design of the flow mechanism and the controls that actuate it are critical. Traditionally, floor-mounted toilets with a manual flush have been the norm in many retail establishments and hospitality facilities. However, wall-hung toilets and touchless flush pates are becoming the new standards since they offer superior features in both performance and design. In particular, those that use in-wall tanks concealed from view and user access provide improved water flow control with cleaner looks, quieter operation, and the potential for cleaner restrooms in general. Some of the notable attributes of this approach are as follows:

- **In-Wall Design** While some may think that a high-performance toilet solution needs to look clinical or austere, the reality is that there are contemporary design alternatives. To accommodate a range of different project types, there are multiple options to bring a design vision to life. Beyond these aesthetic benefits, there are also clear space savings achieved by recessing the toilet tank system into the wall, allowing for more usable space in restrooms in many cases. By hiding the tank and plumbing components in the wall, designers can lift the toilet off the floor to increase accessibility. This design also frees up more space within the bathroom by moving the toilet tank and flush and fill valves inside the wall.
- **In-Wall Performance** In addition to better water control that is available from dual flush actuators, in-wall systems are a reliable and high-quality solution for designing contemporary bathrooms that meet the demands of all involved. Overall, sanitation and safety are achieved by having less of the toilet system exposed

Photo courtesy of Bradley Corporation

**TOUCH-FREE FIXTURES IN PROJECTS**



Touchless fixtures in restrooms are available in different styles and types that help with user satisfaction and operational cleanliness.

The design of restrooms that use touchless technology requires an understanding of the available products and options. It is worth noting first that, as the demand for touchless fixtures has increased, the mechanical components used in sensed systems has been greatly improved. While some older touchless models include sensors that deliver spotty soap and water activations, current designs incorporate advanced sensing technology ensuring continuous and reliable washing.

As for washroom cleanliness and safety, new all-in-one hand-washing fixtures are available that incorporate water faucet, soap dispenser, and hand dryer all in one fixture directly at the wash basin. Such all-in-one fixtures are designed to better contain water inside the handwashing basin to keep water from dripping from hands of the user onto walls and floors, which can breed bacteria and cause slips and falls. In response to health protocols, new washbasin designs with increased space between the handwashing areas allow for social distancing while washing hands. Complement touchless fixtures in restrooms with resilient, smooth, and nonporous materials with seamless construction like solid surface and natural quartz, which help prevent bacteria or mold accumulation and growth.

Photo courtesy of ASI Group



The coordinated selection of materials and finishes in restrooms, including the toilet stalls, can add a level of design excellence and elegance.

and the bowl raised up from the floor. This adds to the comfort and convenience for users as well as ease of cleaning for janitorial crews. In terms of maintenance, all working parts remain easily accessible, although the high reliability of this type of unit reduces the need for maintenance crews to access it in the first place. The support frame is based on solid steel construction with a seamless, one-piece tank made of durable, leak-free, high-density polyethylene. Units are typically tested and proven to support up to 880 lbs. (400 kg) without deforming the frame or the wall.

- **Flushing Options** Installing special flush plate and button designs facilitate hands-free or light-touch flushing. These options make the toilet easy to operate and help keep the bathroom space cleaner and more sanitary than is possible with a standard toilet with a flush lever.

Designers striving to better serve hospitality and retail guests with accessible bathroom design now have many options to do just that. By taking advantage of in-wall toilet design, touch-free technology, and adjustable fixtures, designers can deliver beautiful, functional, and accessible bathrooms to those clients.

**ELEGANT SPECIALTIES**

While the square footage used by restrooms in hospitality and retail settings are not thought of as “revenue generating,” they go a long way in aiding or detracting from the intended experience of the establishment,

building loyalty, aiding in customer retention, improving word-of-mouth marketing, and attracting new customers. At the big picture level, all of these factors do in fact generate revenue and even margins. Leon Shakeshaft, architect and partner, Arthur Gibney & Partners, Dublin, Ireland, has reinforced this, observing, “Last year, I had the pleasure of having a private tour of one of New York’s landmark office buildings. As I appreciated the architecture and the thought that went into the details of the building, I found a lack of harmony between the design choices in the bathrooms when compared to the rest of the building. At our firm, we recognize that all things being equal, the quality of bathrooms can be the differentiating factor when our clients seek to attract tenants. Good bathroom design does not have to cost more, but it pays great dividends.”

Inherent in the total design of a restroom, is attention to all the details of the materials used, the type and location of accessories, and the overall interior design scheme. In order to create a complete, coordinated effect, it is important for an architect to have different material product choices from the same building product manufacturer so that they can have a full palette of products to create their design. Such an integrated design of products means they more easily work in concert with the architect’s overall design intent by either blending in or standing out. The resulting look created in restrooms can thus exude a sense of high-end luxury, without a luxury price. More importantly,

a coordinated, elegant design speaks to how much the establishment cares about its customers beyond the revenue they bring in.

One place this difference can be seen is in the products used for toilet stall partitions. Taller partitions with increased privacy and removal of sight lines offers a more appealing situation for many users. Similarly, a variety of materials can be used, such as phenolic partitions, which offer a variety of colors and patterns creating an enhanced, more elegant look, or metal partitions with integrated privacy systems built into them.

Cyrus Boatwalla of ASI Group has observed the trends in design and notes that, “A disconnect exists, at times, between how well a bathroom is designed when juxtaposed against the amazing structural designs, building envelopes, and curated appointments that are synonymous with modern buildings. The more beautifully a building is designed, if there is a lack of connection between the quality of materials and design elements in the washroom, it stands out even more. This can and will take away from the impact that the designers of the building intended to create. With a little more thought and assistance from manufacturers of washroom products, building owners can have access to a variety of choices that can connect those spaces and help them complete the intended impact.”

**CONCLUSION**

Retail and hospitality buildings are perceived by customers, business owners, and the public based on how well they are designed. Architects who pay attention to the details of the key areas of the exterior, interior, and restrooms can create the most well-received designs that will have building owners seeking them out for repeat work.

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Photo courtesy of Geberit

## RESTROOM PROJECT EXAMPLE 1



**Project:** Hotel Julian  
**Location:** Chicago, Illinois  
**Design:** Gettys Group

**The Project:** The 218-room, 17-story Hotel Julian is located on Chicago's high-profile Michigan Avenue. Though only 50 feet wide, the hotel has a monumental street presence, bringing a new brand of chic boutique luxury to what was once a dilapidated bank building.

**The Renovation Challenge:** The Atlantic Bank Building, originally constructed in 1912, sat vacant for years and the interior was in

poor condition. "We needed to utilize maximum space in each room to accommodate the modern conveniences demanded by hotel guests," says Nawar Telche, director of engineering, Hotel Julian. "This included making the restrooms comfortable and as large as possible. We also needed a toilet for our guests that flushed quietly, in a way that a floor-mounted, exposed-tank toilet may not be able to."

**The Solution:** The Hotel Julian met the challenges of bathroom space, style, luxury, and water savings by installing over 218 in-wall toilet systems with dual-flush actuators and matching white wall-hung toilets. The designers chose the system because of its water-saving quiet flush, easy installation, and concealment in the hotel's new 2x6 walls.

With the sanitary technology hidden, the bathroom looks spacious, with a modern, high-end finish. The in-wall systems help increase bathroom hygiene by greatly simplifying cleaning. Concealed tanks and wall-hung toilets have fewer edges, joints, and corners and an open floor space when the toilet is kept off the floor so dirt and bacteria can't hide.

**The Results:** The narrow, yet luxurious, Hotel Julian, named for the patron saint of travelers, is now an architectural highlight, one of the gems of the Millennium Park area near Chicago's world-famous Michigan Avenue.

Photo courtesy of ASI Group

## RESTROOM PROJECT EXAMPLE 2



**Project:** Hotel X  
**Location:** Toronto, Ontario, Canada  
**Architect:** Stephen B. Jacobs Group P.C.

**The Project:** Hotel X Toronto was designed by Stephen B. Jacobs Group P.C. to embrace all the wonderful flavors of the globe. "It was imperative that every aspect of Hotel X contribute to providing guests with an unparalleled hospitality experience," said Stephen

B. Jacobs, FAIA, president and founder of Stephen B. Jacobs Group P.C. Every detail was carefully selected to offer guests a modern, luxurious experience that encapsulates authentic hospitality and embraces the hotel's historic and iconic location on 192 acres of city parkland in the heart of Toronto's Exhibition Grounds.

**The Washroom Design:** "To convey our design inspiration within the hotel's washrooms, we envisioned an elegant European look that ensured as much privacy as it did design impact. Working together with the manufacturer, we created a completely unique design that is atypical in North America," said Jacobs.

Hotel X's sophisticated washrooms showcase luxury, with deep partitions surrounded by towering solid surface doors, panels, and pilasters that extend from within inches above the floor to nearly touching the ceiling. The panels, doors, and pilasters, made from 13-millimeter phenolic, and robust aluminum headrails (powder coated in black) provide durability to the elegant structure. Hardware and pedestals made from stainless steel stand out just enough to add the right touch of flair.

**The Results:** The stunning washrooms complement the upscale, tailored design of Hotel X, welcoming discerning guests to the bespoke experience of sophisticated luxury.



Photo courtesy of Inpro

## SOLID-SURFACE SHOWER PROJECTS



Solid-surface materials are used in guest room showers at the LondonHouse Hotel in Chicago. They can be fabricated in advance to meet project requirements.

Solid-surface shower enclosures have become popular, particularly in hospitality settings, because they offer aesthetic design options in addition to the practical performance aspects of them. They are available in a range of colors and patterns to blend with a variety of interior design concepts. By selecting large sized sheets, there are fewer seams, which means less cutting, less waste, and less cost, in addition to the hygienic benefit. The material is typically nonporous, too, which means it does not support the growth of mold, mildew, or bacteria.

In the interest of simplifying the design of guest room shower stalls, there are fully prepared and assembled shower stalls available that can meet specific project requirements and meet ADA or accessibility code requirements where needed. Some of the preferred stalls use solid-surface panels as a shower enclosure and a solid shower base. As a material, solid surface offers a great alternative to tile, with no grout required which can 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 substrate. Further, installation of solid-surface shower surrounds can be finished in one-third the time of traditional tile.