THE ACCESSIBLE BEAUTY OF ADA-COMPLIANT RESTROOMS

EXECUTIVE SUMMARY

Imagine an individual with a disability entering a public bathroom only to find that the stall is too small to maneuver a wheelchair or the toilet flush handle is not within reach. This situation is far too common for the 56.7 million Americans who live with a physical or intellectual disability[1]. Architects, interior designers and plumbing engineers can help alleviate this source of frustration and embarrassment by designing restrooms that accommodate users of all ability levels.

However, it is a common misconception that complying with the Americans with Disabilities Act (ADA) means that a commercial restroom has to look utilitarian. The restroom experience can be elevated with stylish fixtures that accommodate ADA requirements, as well as water efficiency. Balancing these design elements creates an aesthetically pleasing bathroom that ensures visitors are comfortable and safe. The key is using proper layout planning and user-friendly products to create an intuitive bathroom design where ADA compliance is all but invisible.

The ladies room in a Chicago hotel lobby features hands-free faucets, which are accented with soft mirror lighting and louvered lavatory doors to enhance the décor.

THE AESTHETICS OF ADA COMPLIANCE

Public restrooms are one of the few spaces in a building that virtually every guest and employee will use at some point. While practical in function, a bathroom's design provides the opportunity to make a lasting impression on users. This highly visible area can enhance the guest experience and create a sense of pride among building occupants. However, a poorly designed restroom that ignores the basic needs of users with disabilities is more than an inconvenience—it's a violation of civil rights law.

Consider that even the simplest bathroom activities are dependent on a combination of senses: vision, touch and hearing. Sight and physical coordination are needed to avoid a slippery spot. Manual dexterity and depth perception work together so a faucet handle, flush valve, or stall latch can be grasped. Signs and icons are read and understood using intellectual abilities. A welcoming design ensures each of these actions is easy to perform for all individuals, no matter their capabilities.

An inclusive restroom design is not only beautiful in intention, but attractive in looks as well. Designers do not have to compromise their design vision to create an inclusive restroom. Attractive bathrooms can seamlessly blend ADA compliance with modern, classic, or transitional aesthetics. There are many products that range from traditional and elegant to sleek and compact that will satisfy accessibility needs while complementing building design requirements and vision.

WE ARE ALL AT RISK OF HAVING A DISABILITY AT SOME POINT IN OUR LIFETIME.

— TOM FRIEDEN, DIRECTOR OF CENTERS FOR DISEASE CONTROL (CDC)[2]

Industrial colors, touches of metal, and stone tile are popular design choices for hotel guest rooms. Every fixture in this luxury bathroom fulfills ADA compliance while creating a relaxing ambiance.

This lobby restroom in a sports stadium exhibits ADA-compliant fixtures, faucets and accessories in a design highlighting popular gray tones with its stone wall and floor tiles, showcasing a contemporary vibe for fans.

MARRYING WATER CONSERVATION WITH ADA

Goals to satisfy accessibility regulations and conserve water are not mutually exclusive. By giving these objectives equal weight in the design, architects and interior designers can create a restroom that is respectful of its users and the environment. No matter whether a project is pursuing a green certification like LEED or the Living Building Challenge, or the client wants to protect natural resources, there are many choices that will fulfill aesthetic and functional requirements.

PUTTING A FACE ON AMERICANS WITH DISABILITIES

There are close to 57 million Americans who have a disability, according to the U.S. Census Bureau[3]. Globally, the World Health Organization estimates that one billion people live with some form of disability[4]. As the vast majority of these individuals will need to navigate a public restroom, architects and designers can use their ingenuity to create a positive restroom experience.

A restroom design should not only satisfy ADA requirements but also be universally accommodating for users of all backgrounds, including those who could benefit from additional assistance:

- Individuals with impaired vision, including those who use Braille.
- Those with wheelchairs, walkers, scooters and canes.
- People with temporary disabilities, such as recovering from an accident or surgery.
- Individuals suffering from stability and balance complications.
- Parents with small children or infants.
- Children and adults of varying heights.
- Users with medical equipment, such as ostomy bags, gastric feeding tubes or chemotherapy ports.

Smartly designed products can satisfy both water efficiency and ADA compliance. Look for high-efficiency fixtures that are WaterSense-certified, which means they save a minimum of 20 percent over the federal standard[5], or ultra-high-efficiency models that can conserve even more.

BRING PROJECTS INTO THE 21ST CENTURY

While it's easier for new construction projects to adhere to ADA standards, existing buildings are far from exempt. When renovating a facility constructed before 1993, it is the responsibility of the property owner to bring the restroom into compliance where feasible. The act specifically states that "a public accommodation shall remove architectural barriers in existing facilities, including communication barriers that are structural in nature, where such removal is readily achievable, i.e., easily accomplishable and able to be carried out without much difficulty or expense."

The *2010 ADA Standards for Accessible Design* identify a number of alterations that will bring commercial restrooms into compliance:

- Install accessible door hardware.
- Add grab bars in toilet stalls.
- Rearrange toilet partitions to increase maneuvering space.
- Insulate lavatory pipes under sinks to prevent burns.
- Offer a raised toilet seat.
- Include a full-length bathroom mirror.
- Reposition the paper towel dispenser.
- Incorporate accessible signage.

ADA REQUIREMENTS AND COMMERCIAL RESTROOMS

TOILET SEAT HEIGHT To provide an easier transition from wheelchairs, there should be 17-19 inches from the base of the floor to the top of the seat height.	**GRAB BARS** These fixtures ensure a person with mobility limitations has extra support. The top of the grab bar must be between 33-36 inches high.
RIGHT/LEFT TOILET LEVERS Manual flush levers (if present) must be placed on the open or accessible side of the toilet, which may be on the left or right, depending on the stall design. Center, push button, trip levers are not ADA-compliant.	**LOW THRESHOLD SHOWERS** These showers offer a low (max ½ inches) curb ledge that takes little effort to step over. For optimal accessibility, roll-in showers provide a barrier-free entrance for users with wheelchairs. Transfer showers must have walls that are exactly 36 inches apart.
WALL MOUNT SINKS AND WATER CLOSETS (TOILETS) Sinks and water closets (toilets) that are mounted on the wall offer better toe and knee clearance because they don't occupy floor space. Supply lines and drains must be insulated.	**MIRROR PLACEMENT** Mirrors must be mounted with the bottom edge of the reflecting surface no higher than 40 inches above the floor.
TOUCHLESS FIXTURES Motion-activated flush valves, faucets, hand dryers, and paper towel dispensers are simpler to operate for users with physical disabilities.	**SHOWERHEAD PAUSE FEATURE** A type of safety feature, a non-positive shut-off button on a hand-held shower handle reduces flow to a trickle if a user releases the button.
LEVER HANDLE FAUCETS Faucets should be lever-operated, push, touch, or electronically controlled. They should be usable with one hand without the need to tightly grasp, pinch, or twist the wrist. Users should be able to turn the lever with no more than 5 pounds of force.	

*All measurements and fixture requirements sourced from the *2010 ADA Standards for Accessible Design*[6]

While this may seem extensive, designers don't have to gut a restroom or upgrade every stall or fixture to satisfy ADA — only one of each fixture type needs to satisfy accessibility requirements. No matter how large a public bathroom is, a minimum of one stall, toilet or urinal, lavatory sink, and mirror must be ADA compliant.[7]

ADA-compliant fixtures are available in a variety of styles, shapes, and finishes that will create an inviting design. Strong geometric lines and industrial finishes are a bold touch in modern restrooms. Traditional bathrooms can be paired with brushed nickel fixtures and circular elements for a time-honored look. Contemporary touches can span both styles for restrooms that have an updated feel with the latest trends.

THE DIFFERENCE BETWEEN ADA AND UNIVERSAL DESIGN

While the term "universal design" is often associated with the Americans with Disabilities Act (ADA), it is a separate method used to incorporate accessible features. Architects and interior designers should always start with the requirements outlined in ADA and then adhere to the principles of universal design as budget allows.

Americans with Disabilities Act is an enforceable mandate that addresses the needs of only a portion of the population. This legal requirement applies to all public facilities, though there are specific guidelines as to the extent that a building must comply and exceptions for structural impracticability. Under ADA, only a portion of a property must be welcoming to guests with disabilities. For restrooms, ADA requires "at least one accessible restroom for each sex or a single unisex restroom."[8]

Universal design is an approach coined by the late architect Ronald Mace[9]. Mace's voluntary set of principles aims to create both products and spaces that are "usable by all people, to the greatest extent possible, without the need for adaptation or specialized design." It also seeks to "avoid segregating or stigmatizing any users" based on ability level. Under this philosophy, accessibility is not an accommodation but an intrinsic part of the overall design. For example, a unisex family restroom would be the preference because it accommodates users with strollers and wheelchairs, as well as caregivers assisting another adult.

This sleek, angular faucet complements any restroom design and pairs well with natural stone and cool neutrals. The touchless sensor makes it easier for an individual with mobility or vision issues to operate the faucet.

A REFRESHER ON THE AMERICANS WITH DISABILITIES ACT

Since 1990, the goal of the Americans with Disabilities Act (ADA) has been to protect individuals with a physical or cognitive limitation from discrimination. Approximately 19% of the U.S. population — or 1 in 5 people — have a disability that affects mobility, vision or cognitive function. Over 50 percent categorize their disability as "severe," and 9.4 million individuals have a limitation that affects their daily living[10]. As the population continues to age, those in their elder years also face a growing risk of becoming disabled.

ADA defines a disability as "a physical or mental impairment that substantially limits one or more of the major life activities of such individual, including but not limited to caring for oneself, performing manual tasks, seeing, hearing, eating, sleeping, walking, standing, lifting, bending, speaking, breathing, learning, reading, concentrating, thinking, communicating and working."

While not a building code, this piece of civil rights legislation covers accessibility in public spaces. The *2010 ADA Standards for Accessible Design* clarify requirements for removing architectural barriers, including those in restrooms[11]. The guidelines also address specific measurements that should be incorporated into accessible bathrooms: toe clearance, side and forward reach ranges, turning space radius, maximums for protruding objects, door clearance widths, centerline positioning for water closets, seat height, grab bar length and placement, dispenser position, height and depths for urinals and surface height for lavatories and sinks.

Restrooms in public spaces are an ideal opportunity to marry an aesthetically pleasing design with accessible features. With thoughtful product selection, beautiful fixtures will add to the ambiance of a commercial restroom, while meeting the needs of users with all ability backgrounds. Whether a restroom uses traditional or modern faucets and fixtures, or a transitionally styled combination of the two, accessibility has a place at the heart of its design, making it beautiful for all to use.

ADA requires that faucets with a lever should be operable with only one hand.

DESIGN OBLIGATIONS BEYOND ADA

When designing a building, ADA is just the beginning — there are specific building codes that apply to accessible design as well. Though these standards closely mirror the 2010 ADA updates, they include additional requirements and technical considerations. Individual states may also have building codes with supplemental accessibility provisions. Architects and designers should take note if these regulations apply to their project, as code adoption varies by regions in the U.S.

Click here for International Building Code ICC/ ANSI A117.1

Click here for Architectural Barriers Act (ABA) Accessibility Standards: Applies to facilities built, renovated, or leased with certain federal funds, such as GSA (General Services Administration), DOD (Department of Defense), and DOJ (Department of Justice) properties.

Amenities at this sports stadium provide a modern, comfortable experience for their ticket holders. This ADA-compliant stall includes grab bars on the side and back walls around the high efficiency toilet and flush valve, which consume only 1.28 gpf.

Grab bars are an important component of ADA because they help users maintain balance while sitting or standing. The polished chrome finish here blends in with the décor, while supporting up to 250 pounds of pull.

In this high-style walk-in shower, the hand-held showerhead contains a non-positive shut-off button that slows water to a drip when released. If a person were to fall in the shower or experience a medical emergency, the shut-off button ensures their breathing will be free of water. Additionally, the barrier-free entrance makes this shower accessible for wheelchair users and reduces the risk of a tripping hazard for all individuals.

The curved hands-free bathroom faucet and soap dispenser complement the rectangular sink and sleek marble countertop in this hotel lobby restroom.

American Standard, part of the global LIXIL Corporation, offers specifiers, facility managers and contractors a wide assortment of ADA-compliant plumbing products that include: commercial and residential toilets, sensor and manual operated faucets, low/no threshold shower bases and accessible shower systems. To learn more, visit: americanstandard.com.

References:

1,3,10. US Census Bureau 2. Centers for Disease Control and Prevention
4. World Heath Organization 5. Environmental Protection Agency
6-8,11. Americans with Disabilites Act
9. The Center for Universal Design

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