

The bathroom is one of the most used rooms in a house, and designers are creating new ways to make it more attractive, usable and accessible.

Better Bathrooms

by Charles M. Schwab, Architect, AIA

What's new in the bathroom is partially the acceptance and attitude that bathroom access makes good sense for everyone.

Bathing and hygiene industrial designers are besting their efforts by creating ever more attractive, innovative and accessible bathroom products. Bathroom home designers are also taking notice of this need and opening their minds to new space planning paradigms.

Both segments see the future and their design efforts as a proliferating market opportunity spurred by consumers warming up to the fact that safety and accessibility can optimize health, be an effective home investment and look great to boot.

The increasing focus on accessible bathrooms could also be attributed to sports,

vehicle and combat injuries or gravity's general effect on us all.

Attention to the bathroom access market is also, at least in part, because of medical advances resulting in people living longer.

A healthy, safe and comfortable hygiene routine goes a long way to making an improved or higher quality of life possible. Regardless of what the game of life throws our way, research reports that 90% of us want to stay in our own homes as long as possible.

Staying in one's own home is a personal and family benefit, and adaptable and accessible bathrooms can help make that happen.

When a mobility-impaired person is not independent in daily living activities, sometimes not enough consideration is given to

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Top photo, a front-of-shower drain is an option for a no-threshold entry. Above, the whole family can use a showerhead with a handheld portion.



A prefabricated shower fits into an existing area.



COURTESY OF TOM FIERSTAD

A bathroom plan should take space under sinks into consideration.



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bathroom space planning for caregivers, mobility aids and assistive technology.

Where To Start

People ask how they can get the most bang for their buck in the bathroom.

With all the new bathroom-ware, cabinetry, water-saving and energy-saving devices, ventilation and lighting items, bathing, hygiene, grab bars, “smart” and healthy products arriving on the market, it’s easy to become overwhelmed.

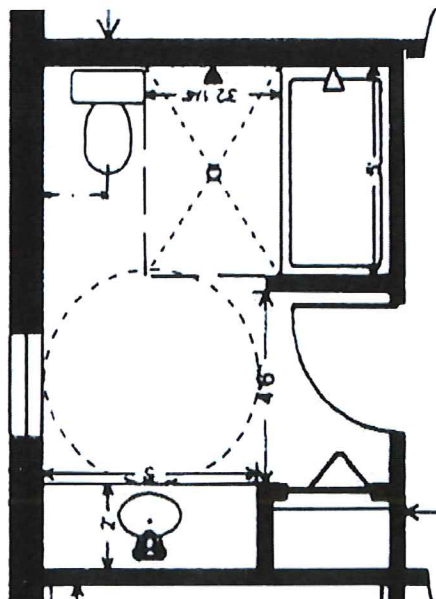
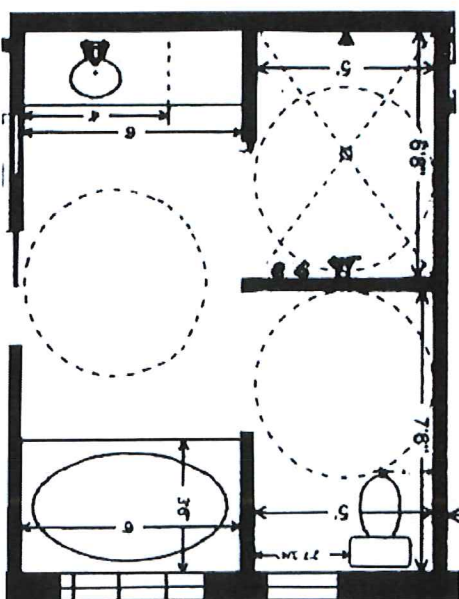
Think big picture first, and that means coming back to the basics of space planning for all bathroom users. It means a universal design attitude, keeping all family needs in mind, with an accessibility focus for the specific needs of the person with spinal-cord injury or disease who uses mobility aids.

That all seems very obvious, but often people initially get fixated on the “bling” of

fixtures, technology or other details without first understanding space needs, such as movement of mobility aids and caregiver and storage needs, to name a few.

If a bathroom assistant is needed, the space for proper functioning needs to be considered first in the general bathroom layout. A severely impaired person will need to plan for more space with proper clearances around the toilet, shower, vanity and storage areas and also understand the transfer process in and out of each activity area. The

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Accessible bathroom plans incorporate space for mobility aids, caregivers and other family members.



Pocket doors are a great way to save space.

A wet room floor membrane provides a seamless, flush floor.



space should ultimately assist in complete function of daily living activities in the bathroom.

Bathroom design basics suggest locating the largest spaces farthest from the entry doors, especially if other family members will be sharing the bathroom vanities, for example.

Space around every fixture, with or without a helper, needs to be considered, as do circulation patterns around others if they're also in the space.

A barn door or pocket door will greatly increase usable space. In a busy family, swinging the door out into a hallway is not a good idea.

Once overall planning is carefully considered at each activity area, only then is it time to look at specific products that will suit your needs most effectively.

Shower Selections

If the mobility-impaired person has good upper body strength and limited space available for an accessible shower, a 3-by-3 foot prefabricated transfer shower might be the best option.

A transfer shower is one where the person only transfers, as opposed to when the person remains in his or her wheelchair and rolls into the shower.

There are new accessible units with built-in linear drains at the entry threshold that make a no-curb entry possible. The more confined unit space of this shower can actually be a benefit over a larger transfer shower because the grab bars are closer and within easy reach, thus more efficient and manageable.

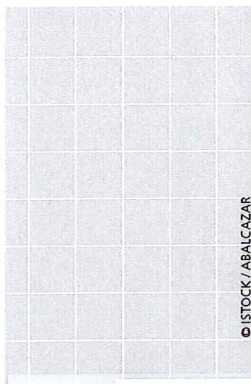
The prefabricated shower product should be constructed with a composite

solid construction that allows for grab bar placement anywhere you want.

When your needs include a shower helper/caregiver, the best solution may be what is known as the European wet room. These found their way into the residential market after originating in the English health care market.

Below, a roll-in shower offers space for both the wheelchair user and caregiver.





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Shower spaces and wet rooms have strategically placed drains, slopes and grab bars, allowing plenty of space for shower chairs and other mobility devices.

bathroom. In that manner, the vanity area is still available to other family members if the toilet/shower area is occupied. When this is the case, an additional powder room is advantageous.

Improved Fixtures

Once the largest spaces are determined, it's time to look into some fixtures and bathroom details.

Hand showers of all types work for any showering options. There also are water-saving and energy-saving controls. Consider an energy- and water-saving point-of-use water heater so water in the hand shower is always the right temperature when you need it. A full-body dryer is a nice complement to any showering solution.

A fan with a humidity sensor is another product to team up with the wet room solution, as parts of the room may contain water.

Hundreds of toilet types are on the market. A glowing toilet night-light can help you find your way at night. There are also connected water-flush devices for toilets.

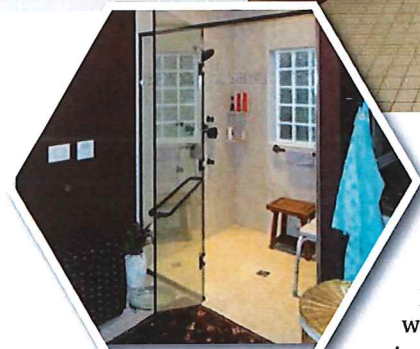
"Smart" electrical outlet connectors with dimming LED lights, water flood sensors and more are being added monthly to the smart

home-connected bathroom. These products are known as "the internet of things."

The Amazon Echo can be utilized with Samsung SmartThings adapters for voice control of electronic and water-saving devices. Then, they can all be connected to and controlled by your smartphone.

For more information on bathrooms, visit accessiblehealthhome.com, or email CharlesSchwab@UniversalDesignOnline.com.

The opinions of the author do not necessarily reflect the position of Paralyzed Veterans of America. ■



COURTESY OF CHARLES SCHWAB

The wet room is made possible when a prefabricated shower pan sits directly submerged in a concrete slab or recessed in wood floor joists.

Liquid latex waterproofing is spread over the entire floor and at least 6 inches up the wall. It's a good idea to bring it up to 5 feet in the immediate shower area. The idea is the entire room can get wet without causing big problems. Other structural details are required, but this should not be a reason to immediately reject the wet room idea.

One linear drain is placed at the downslope of the showering area. Larger tiles are then possible, as there are not four different slopes as in the case of a single drain.

The wet room concept allows more space for caregivers and wet shower chairs after the shower, as well as the ability to easily clean up after bladder or bowel accidents.

A wet room can be designed in a semi-compartment space included within the overall



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