Universal Design Trends will Redefine Decorative Plumbing and Hardware

By Rosemarie Rossetti, Ph.D.



y all standards, I had it all. I had been married for three years to a wonderful man, Mark Leder. We were living in a home we built when we were first married. My two-year-old speaking, training and consulting business was doing well. Life was plump with promise! Then all of this changed on June 13, 1998.

During a bicycle ride on our wedding anniversary weekend, a three-and-a-half ton tree suddenly collapsed and came crashing down on top of me. I was instantly paralyzed from the waist down.

The dream home that Mark and I had built in 1995 had become more of a nightmare. When we built it, we expected to live there for an unlimited time. Now I was face-to-face with steps at the front porch that I couldn't climb.

Fast forward to today — my husband and I are building a national demonstration home in Columbus, Ohio. The Universal Design Living Laboratory (www.udll.com) will showcase universal design, green building and healthy home construction practices.

Awareness of Universal Design

I first became aware of universal design housing while reading a magazine about a woman who used a wheelchair. She designed her kitchen so she could roll under her sink and cooktop. Encouraged by this magazine article, I devoted my time to research.

As I learned more about universal design, I came to understand that it is more than just a kitchen design. It is for the entire house and landscape, and it not a design method just for people with disabilities.

Universal design is a framework for the design of places and products benefiting the widest possible range of people in the widest range of situations without the need for special or separate design. Universal design is good design. When homes and products used in the home are designed with everyone in mind, there is less need for expensive redesign and renovation of the space and more equitable use of products in the home.

Conference Education Spotlight



Rosemarie Rossetti, Ph.D.

president, Rossetti Enterprises, Inc., will present "Successful Universal Design: Eliminate the Fear Factor" Friday,

Oct. 15, 10:15 a.m. - noon; and Saturday, Oct. 16, 3:45 p.m. - 5:30 p.m.





With the increasing population of people with disabilities and an aging population, the need for features that allow people to age in place and have as much independence as possible in their homes is growing. Universal design features aim at creating more access, convenience, safety and comfort.

Universal Design Decorative Bathroom Hardware

When people think of designing homes for people who are aging or who have disabilities, it is common to think about putting grab bars in the bathrooms. Builders often complain that when they install grab bars in a home that is for sale, the potential buyers are often resistant to the look of the grab bars. Grab bars are a symbol of old age, since they are so prevalent in nursing homes. Home shoppers do not want to see themselves as old, nor do they want their homes to look institutional. One interior designer told me he refers to grab bars as "balance bars" and automatically reinforces walls in the bathrooms so the homeowners can install them at a later time.

There are decorative solutions in hardware, including a variety of flanges, finials and finishes. Not only are grab bars decorative but some come with special properties to make them healthier and safer to hold. The grab bars that attracted my attention and will be in my new home are from Great Grabz.

Typically, grab bars are a straight horizontal configuration. A very innovative Wave design by Great Grabz adds an artistic element, as well as full function as a grab bar. It can hold more than 250 pounds of force and has adjustable mounts, which are great for bathroom remodeling projects. This allows the installer to slide the flanges along the bar in order to align with the wall studs.

A research test at the University of Buffalo showed this Wave grab bar to be more ergonomic than a straight grab bar due to the angle of a person's forearm when gripping the grab bar. It makes sense that straight towel bars be constructed sturdy enough so they can be also used as grab bars. We are placing 3⁄4"plywood as blocking in the walls between the studs to support the grab bars by the toilets and in the shower.

These grab bars also are a healthy product because of the recent incorporation of Saniguard in the manufacturing process that helps inhibit bacteria growth. Saniguard is a permanent, inorganic antimicrobial treatment that utilizes a silver ion technology to inhibit the growth of bacteria, molds and mildews that can cause odors, staining and product deterioration. In addition, this epoxy powder coating actually adds a layer of protection to the decorative finishes as well as eliminates fingerprints.

Great Grabz is the first decorative grab bar company to combine this kind of performance with great styling. Abbie Sladick, president of Great Grabz says, "The baby boomer generation Universal design features plumbing hardware and components that complement any bathroom, making the showering experience more safe, comfortable and accessible.

is forcing us to change the way we think about our world. They are demanding innovative design, luxury comforts and products that are kind to the environment."

The Splash series grab bars from Great Grabz was released in May 2009. These rough textured grab bars were manufactured with a sure grip on the bar to help reduce slipping. They are available in the same finishes as the Wave.

Each bathroom project is different and peoples' tastes in bathroom accessories differ. With the wide collection of grab bar choices now available in the marketplace, bathrooms no longer need to have the institutional nursing home look.

The Shower Experience

When it came to designing the master shower in the Universal Design Living Laboratory, many professionals were consulted, including the architect, kitchen and bath designer and interior designer. No other area in our home required us so many design changes.

The step free, roll in shower needed to be sized large enough for me to transfer from my wheelchair to a shower bench. It also needed to allow room for a personal care assistant, should I need help showering as I get older. I wanted a hand held shower nozzle next to the shower bench. My husband, who is 6'4" tall, wanted the shower to accommodate him from a standing position. Two shower stations were included in the 4'3" x 7'3" shower.

The shower floor was slanted towards the glass block back wall. Water from showering will flow to a Quick Drain USA's stainless steel, lowprofile channel drainage system. This will insure that water will drain quickly in the shower and not be a safety problem running out onto the bathroom floor.

From my experiences at hotels, I prefer a shower floor that slants one direction to a drain in the rear, rather than a floor with a center drain. The complex angles of a floor with a center drain make it more difficult to stabilize the wheels on my wheelchair while I transfer to a shower bench.

For safety and comfort purposes, we installed the Kohler 1/2" MasterShower® thermostatic valve with integral volume control and stops in this shower. The valve has a high-temperature (120 degrees Fahrenheit) limit stop. This valve delivers a high-flow rate and precise, consistent temperature control set at the factory at 104 degrees Fahrenheit. The stacked valve allows separate control of the water temperature and flow. By having this valve, we have peace of mind that the shower experience will be safer since there is no chance of being scalded by excessively hot water. From a universal design perspective, this added feature is especially valuable for people with limited vision and intellectual disabilities.



To keep the shower warm while showering, we will install the Warmly Yours electric floor radiant heating system under the tile flooring. Thanks to a low-voltage shower floor heater system, my husband will never have to step on cold tiles again! And we will both be cozy and warm in this spa experience.

Since the radiant heat floor will warm the shower, I can imagine that our water use will be less since we will not have to run the hot water so long to heat up the shower space. Together with our low-flow faucets and recirculating hot water system, it will be good to know that we are conserving water and using very little electric energy in the floor to keep us warm while showering.

Universal design features plumbing hardware and components that complement any bathroom, making the showering experience more safe, comfortable and accessible. As more products are introduced by the manufacturers, the specifiers of those products will come to recognize the value that universal design brings to the project.

Rosemarie Rossetti, Ph.D. is building a national model universal design home in Columbus, Ohio. She is an internationally known speaker, trainer, consultant, and author. To contact Rosemarie, learn about her speaking services, or subscribe to receive her free monthly inspirational articles, go to: www.RosemarieSpeaks.com To learn more about the Universal Design Living Laboratory go to: www.UDLL.com.