

Access: Flourishing at the UDLL

By Rosemarie Rossetti



After my spinal cord injury, my husband, Mark Leder, and I strategized about what an ideal accessible home would consist of and how we could fund and build such a residence. Instead of just building a home for the two of us, we decided to brand the project as a “national demonstration home” that would help educate the public about the potential for universal design, green building, safety and healthy home construction practices. A marketing consultant suggested calling it the “Universal Design Living Laboratory” and the name stuck. We secured corporate sponsors, volunteers and countless other contributions to help us offset the bill. We served as the general contractors, and Mark did much of the construction himself.

The construction took longer than expected due to extreme weather conditions, flood damage, sponsor and volunteer acquisition, scheduling and coordinating subcontractors and redesign while building. But on May 18, 2012, almost 14 years after I was paralyzed, we moved into our new home. Since then, we’ve been enjoying the fruits of our labor and working to fulfill the mission behind the UDLL through various media and products including: our UDLL website, tours to the public, presentations, courses,

articles, books, photos, webinars, videos, radio, TV and Internet interviews.

Independence at Home

Rolling into our new home is achievable independently at any entrance. There are no steps except those leading to the basement. The low door thresholds and wide doorways are especially appreciated. There is an elevator to the basement and loft.

My favorite room is the kitchen and the independence its design and appliances offer. Visitors are most surprised when they see the side hinged oven in the center island. This island has three countertop heights: 30.5 inches, 34.5 inches and 40 inches. The countertop by the sink and cooktop is 34 inches. The lowest section provides me access for food preparation, as well as to enjoy a meal. Guests gravitate to the countertop height of their choice.

The convenient electrical outlets on the center island are useful when plugging in small appliances. More than 50 percent of the storage space is accessible from my wheelchair. The home design considerations for me have not had a negative impact on Mark who is 6’4”. Our home is usable and inclusive to people of various sizes and abilities. That’s the beauty of universal design!

The cooktop and sink have plenty of knee space underneath. In addition to having three burners at the cooktop, there is an in-counter steamer/pasta cooker. Water in this cooker can be drained by turning a knob, so there’s no risk of getting scalded. Having the pot filler at the cooktop is convenient when filling the steamer and pots. The dishwasher is raised 15 inches off the floor and easy to utilize. The side-by-side refrigerator/freezer has full extension shelves and drawers, reachable from a seated position.

The wardrobe/laundry room contains a sink, ironing board system, center island, hanging rods and shelves for clothes storage. The washer and dryer are front loading and are on pedestals for greater access.

Our home has lots of windows to take advantage of passive solar heating. We selected casement windows because the cranks are easy to operate, and the locks are reachable from a seated position.

Better Health

The first noticeable improvement when I moved into our new home was the ease in navigating on the hardwood and tile floors. My shoulders were no longer strained as they had been on carpeting. I realized that my carpal tunnel syndrome pain and numbness in my hands was lessened.

The air filtration system uses a high-efficiency particulate air filter that removes airborne particles. The clean air quality has also been preserved by not using paints, stains and adhesives with volatile organic compounds that pollute the air.

With 3,500 square feet in the home and access to the 2,000 square foot landscape paver area, I have plenty of room to walk with my walker. This gives me the opportunity for more exercise and weight bearing as I stand. The frequency of leg spasms is directly related to how often I walk and stand. As a result, I don’t need to take anti-spasm medicine and get a good night’s sleep. My muscles, bones and joints benefit from walking and standing.

Privacy has been restored, for the first time since my injury I can close the door in our home when I use the toilet. The 2 1/2 bathrooms were sized to accommodate wheelchairs with pocket doors, privacy panels and telescopic doors to ensure that the occupants have adequate space for any size wheelchair.

Doing the Impossible Takes Time

Mark and I approached this project with a passion and dedication that has been with us since the idea was initiated. We have learned to persevere in spite of adversity and setbacks. We have met amazing people who have championed our cause and helped us along the way. By putting a team of architects, designers, marketing experts, public relations specialists, lawyers, manufacturer representatives and construction managers together, we learned the importance of pre-planning and getting advice from a variety of people. As we look back and see the immense challenges we faced and financial investment we made, we turn our attention to the project’s mission. Our home serves as a catalyst for change in the building and design industry. We are

hopeful that our home makes a significant positive difference in people’s lives and gives others hope.

For more info on the UDLL, visit www.udll.com.

Selected Products

Cabinetry – KraftMaid, www.kraftmaid.com. We selected the Passport series because of the 9” X 6” toe-kick. Features include: full extension drawers in the wall cabinets and center island; large under counter drawers for dishes, pots and pans; pull-out spice racks; pull-out pantry cabinet; floor-to-ceiling narrow pantry shelves; pull-out closet organizer for cleaning supplies/products; rolling cart for food preparation and serving.

Elevator – Garaventa Lift, www.garaventalift.com. A Garaventa Lift, model Elvoron HR residential elevator, 42” wide X 60” deep, three stop elevator with automated clear acrylic accordion car gates; roped/hydraulic drive. It is quiet and has self-closing car gates, allowing total independence to get from floor to floor. There is ample room to turn my manual wheelchair in a circle in the cab, as well as room for boxes that I transport with me.

Sinks, Toilets & Faucets – Kohler, www.kohler.com. The toilets are Comfort Height® providing an easy transfer and using only about a gallon of water. The sinks are stylish and allow access for my knees. The handheld shower nozzle is lightweight and conserves water, yet is powerful in delivering water where you need it. The Freewill barrier-free shower stall was complete with the fold down shower bench, handheld shower nozzle and grab bars.