

Universal Design: A Livable Home

by Konrad Kaletsch • May 22, 2009 ©

“I have never seen a building or facility I would say is universally usable. I don’t know that it’s possible to create one. I’m not sure it’s possible to create anything that’s universally usable. It’s not that there’s a weakness in the term. We use that term because it’s the most descriptive of what the goal is, something people can live with and afford.”

—Ron Mace, 1988

INTRODUCTION:

Universal design is often misunderstood as a set of rules. For example, it might sound like your bathroom should have grab bars, even if they aren’t necessary. It seems like a set of rules because we typically see only the end result, the grab bars, not the grander vision they were meant to address. The vision in the background that drives universal design is compassion. In response to it, the solutions that arise, such as the grab bars, provide lives of independent living, security and joy.

These following concepts are a foundation for having a home that is practical, livable, safe and a pleasure for both residents and visitors. They aren’t answers or rules. They serve you as an introduction upon which you get to craft the “rules” that work best in your home. The result of their application is a home that serves you more than you serve it.

LOW MAINTENANCE:

Although not a principle of universal design directly, maintenance does have a lot to do with ease in using a given product or environment. Every time we acquire something, we must consider the downside of maintaining it. Will it require frequent maintenance? Will the maintenance take long? Is it physically hard to do? Is it expensive? Therefore, the choice of a product or environment that requires less maintenance is a universal design choice. A house whose siding doesn’t need painting, compact fluorescent light bulbs that rarely need replacing, flooring that doesn’t show the dirt and is quickly cleaned, and so on, are everyday examples. Less maintenance leaves you with more time, more energy and more money to do the things you want to do.

ADAPTABILITY:

Adaptability is a key element of universal design; it is a design approach that anticipates changing needs over time. It is the ease and flexibility with which you make an alteration because you planned and built for a future need. It is much easier to add grab bars to a bathroom whose walls were reinforced during construction. If you live in a multi-level home, design one floor to be 100% livable should access to other levels of the home become impossible, even for short periods of time. This floor would be zero-step access (including thresholds), wide doors and halls, full bathroom, ample maneuverability, a

room that can serve as a bedroom, and kitchen access. Zero-step is a bonus (imagine your wheeled luggage rolling all the way to the bedroom); wide halls can accommodate bookshelves, bikes, and storage until needed; wide doors and a full bathroom are always a plus; and, a library, den or dining room can become a bedroom. Not only would your home comfortably serve you over a variety of needs, it would be a home that is visitable.

VISITABILITY:

This refers to homes having a minimum level of accessibility required for someone in a wheelchair to visit without the need for special equipment or an attendant. Wheelchair accessibility is the measure of a visitable home because if a wheelchair user can visit, so can a myriad of other people with physical limitations. Your home can be visited because your entrance is wide enough, there are no steps or bumpy thresholds, and the bathroom is accessible. That's it. I live in a century old brownstone. Many years ago, it became impossible for my father to visit. Recently, it became impossible for my mother. What were the builders thinking when they designed steep staircases, second floor living, narrow doors and tiny bathrooms? For many people, such homes become prisons locking inhabitants in, and visitors out. Statistically, you have an 80% chance of using a wheelchair at some point in your life. How visitable is your home?

LONG-RANGE BENEFITS:

Like most long range planning, the extra pennies spent now save dollars in the future. Although your motivation to create or move into a universal design home might be coming from an immediate need, if you are able-bodied consider the long-range benefits of a universal design home before a need forces the change. Long-range benefits include having a visitable home, having a home that works brilliantly while you are recovering from injury or living within new physical limitations, having a home that is more sellable, having a home that is easier and safer to live in, having the ability to live in your home for as long as you choose, and, not having to make an undesirable decision such as a high-cost renovation or relocation. After all, there's no place like home.

PHYSICAL & EMOTIONAL SUPPORT:

Consider working through your chores of the day with ease versus fighting challenges and risks each step of the way. Throughout the day, you not only navigate a physical world, you experience an emotional one, either a sigh of relief or a grunt of frustration (maybe despair). Universal design reduces the physical strength necessary for certain tasks and provides the best emotional experience. For example, seating options throughout a home, such as benches, provide welcome places to rest or to set down heavy items you are carrying; place them near stairs and entrances, as well as in bathrooms and closets. Grab bars, great in the bathroom, would be handy in many other parts of the home. Design for emotional support in the form of natural light: lower window sills make it easier to see outside from a seated position and requires less physical strength to open and close; natural light also reduces depression. Varied counter heights provide physical support by providing different work heights for different projects. Raised washer and

dryers make laundry easier as do raised ovens. In addition to the many practical and safety benefits of universal design, consider the emotional benefits and the impact a positive emotional experience has in your life.

MANUEVERABILITY:

When designing a home favor large spacious layouts. For wheelchairs use you'll need turn-around areas that are 5' x 5' feet in the kitchen, bathroom, entrance area, and garage. But wheelchairs aren't the only reason to focus on ease of movement. Design your kitchen so that children never have to be underfoot while you are shifting hot items; give them their own workstation where they can do homework, make brownies, or finish a school science project. Create spacious entranceways; put your shoe storage nearby and make it possible for winter boots to come off without blocking the flow of others coming in from the cold. Have two sinks in the bathroom and perhaps follow the European style of the water closet being a separate room. In so many ways, you know exactly where the bottlenecks are to the flow of your home; look for the ways universal design can increase the ease and flow of movement in your home.

REDUNDANCY:

As you consider home improvements, look to include redundancy as a means to keep you going strong. Redundancy is duplication such that if one system fails, another is still working. The most practical applications are: two-bulb light fixtures so that if one goes out, you still have light when you need it. Also: smoke detectors, stoves, doorbells and telephones that have both audible and visual alarms; electronic devices that ask you to confirm a command a second time; and timer switches where there is risk of forgetting to turn something off. Redundancy is your back-up system.

CHILDREN:

Some applications of universal design can present risks for children. For example, a window with a lower sill favors outdoor visibility from a seated position, but it also becomes a greater falling hazard. Raised electrical outlets raise interest for curious toddlers. To ensure the safety of both children and adults, always comply with applicable federal, state, and local laws, ordinances, and regulations. And, as needed, evaluate and child-proof your home; employ the services of a child safety expert to child-proof for maximum safety and greatest peace of mind.

NATURE:

What used to be a back door that opened to fields and forests now is a back door that opens to a few feet of lawn and your neighbor's back door. In our suburban culture, the importance of nature and its contribution to our psychic and emotional well-being is being forgotten. When designing a home, bring nature in through windows and skylights and make it possible to go out and sit among plants, smells, birds, breezes, sunlight and shade. In densely settled areas, landscape to offer at least an illusion of seclusion; have a

place to absorb the rejuvenating qualities that only nature affords. For enterprising individuals, include the opportunity to garden.

CONCLUSION:

Homes have changed greatly since the cave. New materials and technology shifted how our homes work. It is now possible to say that it's the home that's disabled, not the person living in it. A fall is more often the result of poor home design than the result of a health condition. As such, there is little reason to have a home that poses risks to the user. Every time you make improvements to your home, review which universal design guidelines and features apply and employ as many as is possible. The above categories are for your inquisitive thinking, "What if my home could take care of me better than it does?"

About Konrad Kaletsch, CAPS

Konrad Kaletsch is a writer and consumer advocate for universal design. His forthcoming book and website provide both useful information, and more importantly, an understanding as to why this new building paradigm matters. For additional information, go to Universal Design Resource at <http://www.universaldesignresource.com/>. For professional networking, please join the universal design Network on LinkedIn, http://www.linkedin.com/groups?home=&gid=1291067&trk=anet_ug_hm.