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Volume 3, Number 2, Issue 14
April 2008



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**Making The American Dream Universal
Breaking Ground Developments**

Making The American Dream Universal

Ken Little



View of front Porch

synopsis

“Baby boomers” could find their homes impossible to live in because of unanticipated medical conditions or disabilities—a reality that proponents of the universal design concept would like everyone to consider.

Universal design should be embraced by builders and contractors, in addition, to “baby boomers” who can dictate the demand for universal design.

A universal designed home should absolutely have no place inside or outside the property that cannot be used independently by someone who has enough ability to achieve that; and if they’re unable to live independently, it should be set up for a care giver or someone else to live there.

Americans age 55 and over will buy one of every five new homes sold this year, research by the National Association of Home Builders shows. But in the blink of an eye, those “baby boomers” could find their homes impossible to live in because of unanticipated medical conditions or disabilities.

It’s a reality that proponents of the universal design concept, like Eric Anderson, would like everyone—not just those with pre-existing disabilities—to consider.

As America’s population ages, Anderson hopes the “baby boomer” generation takes heed. The Baltimore-based specialist in accessible housing services anticipates a growing need and is taking universal design to a new level.

Independent Living

Client Michael Morgan understands the message Anderson is trying to convey better than most people. The 34-year-old Baltimore man was injured in an automobile accident seven years ago that left him a paraplegic, with only limited use of his hands and arms. Like so many other Americans with life-changing disabilities, Morgan has searched diligently to find a home environment that meets his unique needs and his desire to live as independently as possible.

"Feeling 'at home' is not something that you enjoy too often after an accident like this," Morgan says.

Anderson is committed to providing affordable housing tailored to the needs of disabled clients like Morgan, who lived in one of Anderson's remodeled properties for several weeks while his own home was being renovated. "But universal design is not just for those with disabilities," Anderson says. He wants to see universal design embraced by builders and contractors, in addition to the "baby boomers" who can dictate the demand for universal design homes.

"My target audience is anyone who wants to obtain accessible housing through modifications or purchasing a new house with universal design concepts. I want to give people the ability to create an environment, which allows them to live as independently and safely as possible today, but also in the future. Since accessibility codes don't apply to single-family housing, universal design works well for people with disabilities, people like Michael," Anderson says.

"When people like Michael become injured, because of the severity of their injuries, they need answers now. They can't wait six months."

Anderson purchased a 1,000-square-foot home in suburban Pikesville in 2005 and completely remodeled the property to include over 70 features of universal design. To the casual observer, the beige, ranch-style house looks no different from others in the tree-lined suburban neighborhood. But the interior and outdoor areas subtly incorporate accessible and universal design features.

The unique combination of universal design concepts and innovative ideas has drawn attention from local agencies that work with the disabled, including the Baltimore County Department of Aging. Anderson was recognized with the 2006 Accessibility Award from Baltimore County's Commission on Disability.

He says the accolades are all well and good, but positive feedback from a disabled person like Morgan demonstrates where the practicality of the design innovations really hit home. Morgan, who faces daily challenges most people can't conceive, gives Anderson's model home glowing reviews.

"...give people the ability to create an environment, which allows them to live as independently and safely as possible today, but also in the future."

"You spend so much time in a hospital and institutions that you just want to go home and get back to normal as soon as possible. Something like this house, it gives someone a positive boost in spirit," Morgan says. "A place like this allows that to happen. What's great about this house, from the front to the back, is there is absolutely no place inside or outside this property that cannot be used independently by someone who has enough ability to achieve that. And if they're unable to live independently, it's set up for a care giver or someone else to live here."

Spreading The Message

Anderson, 39, founded a company 10 years ago to provide services related to the home health care field. Through interaction with disabled clients, he saw how traditional architectural barriers restricted his clients' ability to live in their homes, and he began developing solutions. Anderson has since obtained his real estate license, a contractor's license, and an appraiser's license to effectively tie together accessible housing concepts with aspects of universal design.

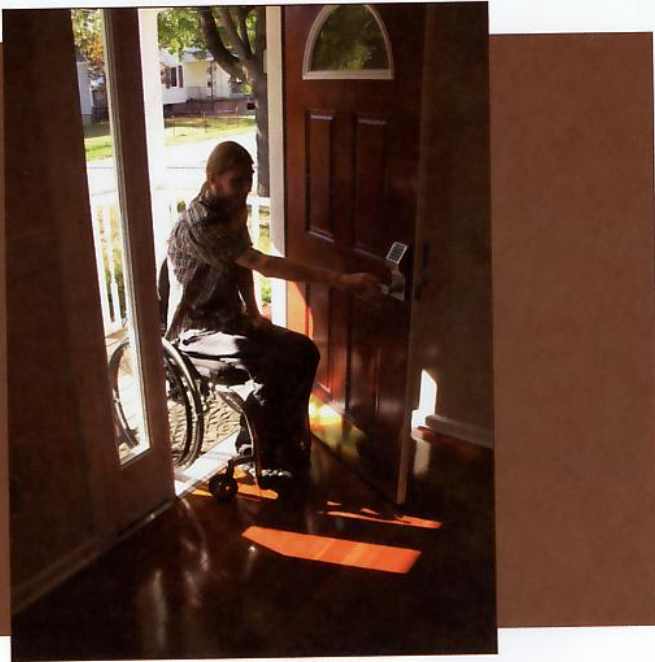
One of Anderson's primary goals is to promote independence for physically impaired users.

"There are few, if any, realtors or appraisers who specialize in universal design housing," he says. "I focus on affordable, accessible single-family housing. I don't typically work with multifamily buildings. I want to provide the American dream. The American dream is having your own home, so I created a model house to show people how universal design can attractively create a livable environment for anyone. If you're disabled, you have very few places to live. You have to think of community amenities, like local restaurants, shops, and expected services, so all these things factor in to where somebody wants to live. Once you determine where you want to live and you look in that particular town or neighborhood, you'll find a house, but it's not going to be accessible. You're very limited."

A Walking Tour

Anderson, accompanied by Morgan in his wheelchair, walks the property and goes from room to room in the redesigned home, pointing out some of the universal design features.

Fill was applied outside to build up lower levels on the property and reduce the elevation difference. Sidewalks are level with little or no slope and are at least 36 inches in width. The maintenance-free exterior includes a cement ramp and composite walkway. There's a level driveway area with at least 13 feet of clear space.



Entrance

"Universal design suggests using dirt to elevate the ground, which decreases the difference between the main level of the house and the ground. Doing this reduces the need for a wheelchair ramp," Anderson says. "The house previously had 24 inches of elevation between the front door and driveway, which would have required at least a 24-foot ramp. By elevating the ground, I was able to use inclusive design to incorporate a small ramp behind the front porch railing. The house appears to have a normal front porch."

The main entrance includes house numbers in large, color-contrasted lettering clearly visible from the street. The house has an awning to protect the entrance from rain and snow and a five-by-five-foot landing outside the front door, which is 36 inches wide, for better wheelchair accessibility.

The main floor is at ground level, and the porch floor is at the same level as the ground floor inside. There are no raised threshold exits to impede access to the house. There are lever-style door handles that can be pushed down with an elbow—an important feature for those with a disability or someone coming in the house with dirty hands.

Anderson installed a remote lock system in the doors that eliminates the need for keys. There's a front door intercom that allows someone inside to speak with a visitor before they are let in.

"If you look at the front door, you'll notice the long window along the side of the door. This sidelight allows a child or someone who uses a wheelchair the ability to see who's at the door without using the peephole. The sidelight also allows natural light into the house. It's things like door sidelights that

subtly incorporate universal design into the house, which makes it usable for all populations," he says.

On the porch next to the front door, Anderson built a shelf, allowing items like groceries to be set down while he is letting himself in. An electric door strike permits access to the house from any telephone inside, and a video camera mounted at the door allows a person in the master bedroom to see who is visiting without having to go to the door. Everything can be controlled from the bed.

"It's terrific. The door system gives you security. I can see the person outside through the camera on the master bedroom TV, as well as being able to unlock the door through the phone. The keyless door also works well for someone who doesn't have the ability to hold a key. You simply enter the combination and the door opens," explains Morgan.

There is no change in the flooring levels between rooms. Any threshold over one-half inch is considered a barrier. "The design feature eliminates a lot of wear and tear on the shoulders and wrists of a wheelchair-bound person attempting to get from room to room in a manually controlled wheelchair," Morgan says.

Morgan enjoys cooking for himself and his wife, so the universal design kitchen created by Anderson is one of his favorite rooms in the house.

Wide-Open Space

The bright, wide-open room offers lots of floor space for maneuvering. There are counters and other work surfaces at two or more different heights and enough clear counter space to set down dishes next to all appliances.

The kitchen also features rounded corners on all counters and clearance under counters for meal preparation. There are anti-scald, single-lever handle faucets and a raised platform under the dishwasher to eliminate bending and kneeling.

Lower cabinets have pullout drawers, and the upper cabinets have pull-down units. The stove is operated by front controls. There are looped handles on kitchen appliances and a side-by-side refrigerator and freezer.

"I can tell you that while working in the kitchen, if you count how many times I have to pull items down with cabinet drawers in the course of making one meal, you realize how important this is," Morgan says, gesturing to the pull-out lower cabinets.

"It's virtually effortless. Even if I didn't have two hands, I could still operate it," he says. "Living with a disability in a normal house, you're typically isolated to a few rooms—due to the barriers—or you're unable to use all the aspects of the house. These barriers shrink your world, and I can't tell you



Kitchen Area Sink



Open Kitchen Area

what kind of effect it has on you and the people you live with. To overcome those barriers and be able to prepare a meal in the kitchen makes me feel more productive and, at the same time, takes weight off my wife's shoulders. This house is terrific. It does it all."

The barrier-free bathroom also incorporates ample floor space for movement between bathroom fixtures, a walk-in shower with a minimal threshold and a minimum 36- by 60-inch shower area. It has an adjustable-height, handheld showerhead with convenient controls, reinforced grab bars, and a built-in shower seat.

There are anti-scald, single-lever handle faucets, rounded corners on bathroom counters, and a toilet seat between 17 and 19 inches in height. There's a telephone in the bathroom and clearance under the sink to allow someone to sit or use a wheelchair to wash his face or brush his teeth.

The sink has a drain located toward the back, allowing for more clear space. The no-step shower is designed for multiple uses, and provides an area to transfer on and off the toilet and serve as a wash area.

"This shower is actually set up better than the one I designed for me at my house. With a fold-up chair, you're completely surrounded by support. You can easily change gears in this room. You can come in here and just hose this place down," Morgan says.

The house has a laundry area on the main floor with front-loading appliances on raised platforms and with front-operated controls. Elevated appliances provide better access to all users since they're elevated off the ground. There is adjustable closet shelving and pull-down closet rods.

Doorways in the house and maintenance-free hallways are 42 inches wide. There are large, rocker-style electrical switch-

es, and all electrical outlets are 24 inches above the floor, while the programmable thermostat and other controls are placed about 48 inches above the floor. The circuit breaker panel is easily accessible, and the house features lighted switches that are visible in the dark.

French doors lead out of the kitchen onto a spacious rear deck, connected to a no-step sidewalk, leading to the back yard and driveway. The house also has a guest bedroom suitable for a care giver or a visitor. The living room, right inside the front door, offers all the amenities of a standard house and incorporates flooring designed for wheelchair use.

"If you met 20 guys in wheelchairs, there's a good chance that over half of them would have a care giver of some sort. The families and caregivers are being thrust into a whole new job description. You have to think about them too, and not just what you're going through," Morgan says.

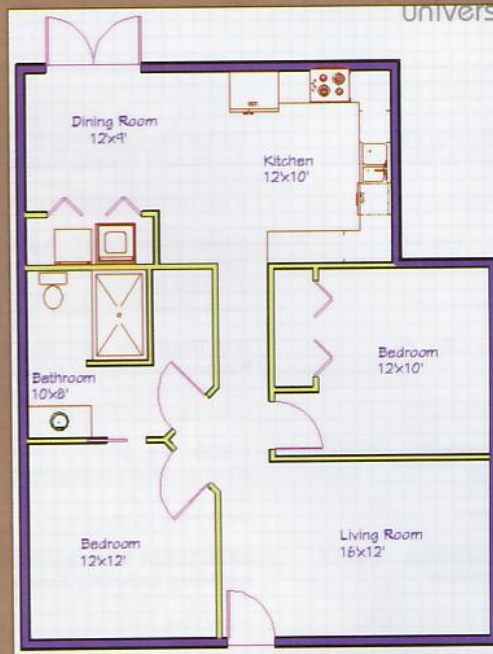
Educating Realtors

One of the biggest hurdles for accessible housing and universal design is the education of realtors. "When a house is listed for sale and entered into the Multiple Listing Service, realtors are responsible for accurately describing features of the house. In the region encompassing Maryland, realtors commonly check 'Accessible Entrance' as a feature of the house, not realizing if the path to the door has more than a half-inch threshold or barrier, it really isn't accessible," Anderson says.

"This is a national problem. If you're disabled and you want to find a house, good luck. Builders, contractors, and code officials could be building these types of houses, serving the needs of diverse populations, but choose not to," he says.



Barrier-free Outdoor Access



Floor Plan

Anderson believes the goal of providing affordable housing to the disabled population is not impractical or far-fetched. "Using universal design components in a home, such as wider doors, often does not cost more than five percent above the expense of standard construction materials," he says.

Anderson hopes to branch out from the Baltimore area and eventually serve clients in other sections of the country. Meanwhile, he is committed to spreading the universal design gospel to professionals in the housing industry, along with baby boomers, a population often reluctant to consider future needs.

One final quick fact: The nation's elderly population is projected to double in the next 25 years.

"Universal design just makes sense for everybody. It looks good and creates a roomy living environment," Anderson says. "If people were to be proactive and think about creating an environment, which serves their needs now and in the future, they're going to be able to make better economic decisions because they are not going to be forced to do it, they're going to be able to do their research and explore options. The key is for them to make a decision when they're able-bodied." **UD**

The Author

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Barrier-free Wide-Door
Access To Patio



Barrier-free Bathroom