

# Home\$ense

Thoughtful Universal Design:  
No Barrier to  
Outstanding Architecture

by L. Catherine Hader

**2005 Award of Excellence  
for Architecture**

**Kessler Residence  
Chevy Chase, Maryland**

**Robert M. Gurney, FAIA**  
M.T. Puskar Construction Company, Inc.

In most public or commercial buildings, accessible design is now so well integrated that we are largely unaware of it. But though our built environment is becoming increasingly accessible to people with physical limitations, accessibility in single-family homes lags far behind the public realm, posing a significant challenge to independent living for many. Perhaps the proliferation of poorly executed design solutions has led us to believe that compromise is inevitable: we can have good residential design or we can have accessible design, but we can't have both.

The Kessler Residence, designed by Robert M. Gurney, FAIA, according to principles of universal design (see sidebar) and completed in 2003, has turned this common misperception on its head. The home earned a 2005 Award of Excellence for Architecture, one of only four projects so recognized in a very crowded field of submissions. While the project could earn plaudits solely for accessibility, that was not among the criteria for this award, which the jury conferred primarily in recognition of the way a modern aesthetic has been integrated into a traditional neighborhood context.

Viewed from the street, the Kessler Residence, with its columns, clapboard siding, and steeply-pitched standing-seam gable roof, echoes the forms and materials of its surroundings. The house could easily be mistaken for a contemporary of its 20th century neighbors, the newer materials and details a reflection of a recent



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modernization. Standing only 36 feet wide on a narrow 50-foot-wide lot, the iconic gable form conceals from the street the full volume and modern character of the house, which stretches deep into its narrow site to enclose 3,800 square feet of living space.

As you step through the traditional entry, you find yourself in a modernist home of open spaces and distinct geometric forms. On the first floor the kitchen is fully open to the dining room and beyond to the living room, all free of interior walls or partitions. A window wall runs the entire length of the living space and opens directly onto a linear stone terrace into which a 75-foot lap pool has been crisply cut, extending the living space to the outdoors. The far side of the pool is edged with a bed of stones and pebbles and enclosed by a concrete wall incised with a pattern of vertical grooves that echo the pattern of the window wall. Altogether, the restrained composition evokes the serenity of a Japanese garden.

Openness is a hallmark of modernism, but for Lewis and Tamara Kessler, it was also a matter of necessity. They were determined that their ten-year-old daughter, Isabel, born with cerebral palsy, would have the full run of the house, just like her twin sister, Olivia. The colonial home in which they had lived—with its many stairs and narrow hallways and doors—was a difficult environment for a child for whom a wheelchair or canes are essential tools of independence and mobility. Weighing the relative merits of renovation versus new design, the Kesslers decided to start from scratch.

They began with a visit to the AIA/DC Architect/Client Resource Center, where they reviewed numerous portfolios before narrowing their choices to three or four architects. They arranged interviews with each architect on their short list, ultimately selecting Gurney not only for the quality of his work, but also for the ever-important intangible factor: their comfort level with him personally and with his design approach. They retained him two months before they selected a site on which to build, which enabled them to benefit from his knowledge and expertise in evaluating sites.

Working with the Kesslers over the course of nine months, Gurney incorporated universal design principles into all design decisions. From the front yard of concrete (grass can be tough to navigate) a gently sloped ramp leads to the front door. Inside, the space has been designed to facilitate movement. Doors are wide with flush thresholds. Appliances and workspaces accommodate wheelchair access, and a centrally located elevator affords access to all floors of the house. The lap pool is less a luxury than a necessity, a place for therapeutic water exercise. Dubbed "The Aqua Living Room" by daughter Isabel, the 42-inch deep pool is now the one place she can be completely on her own. This past summer she was tall enough to enjoy it unaccompanied, though she frequently enjoyed it in the company of her sister Olivia or friends.



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For the most part, visitors to the home aren't aware of its accessible features until the Kesslers point them out. "When barriers are taken down," says Lewis Kessler, "you don't miss them."

Now approaching their third year in their home, the Kessler family remains pleased with the results. "We don't talk about it everyday, but the other day we were just hanging out and looked around, and decided we are still really pleased with it," says Kessler. "Everyone has specific wants and needs. We touched on all of them, and there's really nothing we would change."

## THE PRINCIPLES OF UNIVERSAL DESIGN

According to The Center for Universal Design, the term "universal design" was coined by the Center's late founder, Ronald L. Mace, FAIA, to describe the concept of "designing all products and the built environment to be aesthetic and usable to the greatest extent possible by everyone, regardless of their age, ability, or status in life." Seven principles guide universal design:

### PRINCIPLE ONE: Equitable Use

The design is useful and marketable to people with diverse abilities.

### PRINCIPLE TWO: Flexibility in Use

The design accommodates a wide range of individual preferences and abilities.

### PRINCIPLE THREE: Simple and Intuitive Use

Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or current concentration level.

### PRINCIPLE FOUR: Perceptible Information

The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities.

### PRINCIPLE FIVE: Tolerance for Error

The design minimizes hazards and the adverse consequences of accidental or unintended actions.

### PRINCIPLE SIX: Low Physical Effort

The design can be used efficiently and comfortably and with a minimum of fatigue.

### PRINCIPLE SEVEN: Size and Space for Approach and Use

Appropriate size and space is provided for approach, reach, manipulation, and use regardless of user's body size, posture, or mobility.

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For more information, visit the Center's Web site at:  
[http://www.design.ncsu.edu/cud/univ\\_design/ud.htm](http://www.design.ncsu.edu/cud/univ_design/ud.htm)



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