



INTERIOR DESIGN

Today and Tomorrow

UNIVERSAL DESIGN SOLUTION MEETS COUPLE'S LONG-TERM NEEDS

BY TROY BLEWETT



This retired couple had lived in their four-bedroom, 2,800 square-foot Colonial for nearly 50 years when changes to their health caused them to consider moving. An unexpected heart problem seriously compromised the wife's mobility, which was already hampered by arthritis. Her husband periodically relies on a cane to get around. Looking ahead, they both felt they needed to consider living space with wheelchair access.

"Our house had not been designed for people of our age with looming mobility challenges," he says. "Before we moved, however, I wanted some ideas on ways we might retrofit the house to better suit our current and future needs."

With the home's master bedroom on the second floor, the laundry room in the basement and a narrow master bathroom, the couple knew a renovation would be a challenge. As such, they contacted several local remodelers for ideas. After receiving several bids, the couple hired Michael Nash Design Build & Homes, the same firm that had remodeled their kitchen years earlier.

"Their all-under-one-roof services—which combine design and construction with an enormous showroom full of finish work options—was the deciding factor," he says. "The company had really evolved since we worked with them a decade earlier. Plus, they were very responsive to our situation and really understood aging-in-place considerations."

"Aging-in-Place (A-I-P) solutions are rapidly becoming one of the high-demand sectors of the remodeling industry," says Sonny Nazemian, president of Michael Nash and a Universal Design Certified Remodeler (UDCR). "It's a specialty area which requires staying on top of always-evolving ADA (American with Disabilities Act) regulations and strict building codes. The art of delivering a winning outcome for older homeowners with A-I-P requirements consists of mastering design ideas that normalize a special-needs environment. That's one of the reasons that we proposed a universal design solution for these homeowners. They anticipated the need for rooms large enough in which to maneuver a wheelchair,

Page 43: The homeowners anticipated the need for rooms large enough in which to maneuver a wheelchair, but they also wanted an aesthetically and functionally improved living space.

Above: To provide additional storage, Michael Nash closed in the garage and added new closets and cubbies.

Opposite, clockwise from top: Another view of the closed-in garage; the walkway that runs from the master bedroom around to the rear of the house; and a view of the 1,200 sq. ft. addition, where special attention was paid to making sure the plan and design matched the existing house. Exterior brick cladding was matched to the home's original masonry, creating a seamless enlargement of the existing house.





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The new design called for an addition extending directly from the rear elevation of the house into the backyard. The couple would have much larger sleeping quarters and his-and-her walk-in closets. The master bathroom suite would be “wheelchair-friendly” with a bench in the shower, grab bars, hand-held body spray nozzles, light sensors and heated floors. The homeowners also decided to create space for a first-level laundry room. Altogether, the new addition would be 1,200 square feet with a 14-foot cathedral ceiling, lots of natural light and double French doors that open to a flagstone patio.

The biggest challenge facing the Michael Nash team was the backyard terrain that ascended at a 20-degree angle from the home’s rear door. To create the 28’-by-42’ footprint needed for the new addition, they had to excavate down three feet from the existing surface, remove six metric tons of earth and plant shrubs and several trees to achieve the necessary compaction. To keep water runoff under control, they introduced a French drain and swell linked to an infiltration trench.

“There can be a surprisingly tricky set of engineering requirements in working around uneven terrain,” Nazemian says. “A lot of contractors won’t take on challenges like this because the building code on compaction issues is quite strict.”

Special attention was paid to making sure the plan and design for the new addition matched the existing house. Exterior brick cladding was matched to the home’s original masonry, creating a seamless enlargement of the existing house. Interior floors were milled and finished to blend with the hardwood floors in the existing structure.

To insure lots of natural light and comfort, low-E, double Argon-filled glass was specified for all windows, including a pair of double French doors that lead to the patio. A smaller, louvered door was created for the family’s Irish setter who exercises in a side yard.

A new split-system HVAC unit was installed to provide the new addition with dedicated heat and air control. The solution proved to be a significant money saver, since it concentrates temperature requirements in rooms where the couple spends most of their time. At

Above left: The master bathroom suite is “wheelchair-friendly” with a bench in the shower, grab bars, hand-held body spray nozzles, light sensors and heated floors; and the new design allowed for space for a first-level laundry room.

Opposite: A view of the addition from the spacious hall that leads from the master bedroom past his-and-hers closets, through double French doors into the existing main house.



200 square feet, the master bathroom is a masterpiece of efficiency and warmth. The door from the bedroom is 32 inches wide with a 90-degree swing radius as required by the ADA regulations, yet the interior design is soft and earthy, with porcelain tiling offset by walnut cabinet facings and a granite-topped vanity.

Outside the master bedroom, a flagstone patio links to a series of paths leading to a relaxing gazebo.

Finally, to provide additional storage, Michael Nash closed in the garage and added new closets and cubbies.

Importantly, the homeowners say the remodeling changes have created a significant improvement in their quality of life. “We’re confident the new remodel will meet all of our current and future accessibility needs,” he says. “This home accommodates everyone from 9 to 90.”

MORE ABOUT UNIVERSAL DESIGN

According to the National Association for the Remodeling Industry (NARI), universal design is about creating accessible spaces for all people, not only for those who

wish to age-in-place but also families with special needs and families that are forward-thinking. Here are the 7 principles of universal design from www.nari.org:

- Equitable use: Design is useful and marketable to people with diverse abilities.
- Flexibility in use: Design accommodates a wide range of individual preferences and abilities.
- Simple and intuitive use: Design is easy to understand regardless of the user’s experience, knowledge, language skills, or current concentration level.
- Perceptible information: Design communicates necessary information effectively to the user, regardless of ambient conditions or the user’s sensory abilities.
- Tolerance for error: Design minimizes hazards and the adverse consequences of accidental or unintended actions.
- Low physical effort: Design can be used efficiently and comfortably with a minimum of fatigue.
- Size and space for approach and use: Appropriate size and space is provided for approach, reach, manipulation, and use regardless of the user’s body size, posture or mobility.

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