Architects create a Chevy Chase, Md., home that brings outside indoors

A home designed for the sun



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Architects John Murphey and Marcie Meditch built the interior and exterior spaces of their Chevy Chase, Md., house with natural light in mind.

For years, architects John Murphey and Marcie Meditch lived in houses they didn't like.

Their house in Chevy Chase, Md., was dark and boxy but they had lived with it since 1990 because the schools were good. Finally, a few years ago, the house no longer worked for them. "The old house was falling apart, and had a basement that flooded," Meditch said.

They decided to design a new house for the lot.

Both Meditch and Murphey could envision the boxy, dark house replaced by one that would maximize natural light and bring the outdoors inside. The only downside was they would have to move out and rent a place nearby for two years while they executed the project.

Ultimately, the 7,200-square-foot lot drove the design of their new home. "The house is shaped by the

area around it," said Murphey, a native of Michigan whose exuberance seems to be the driving force behind the project. "There are terraced areas and ways to get outside. It had to fit within the confines of a tight lot," he said.

In the end, the three-level house plus the rooftop is the kind of space that the couple are eager to return to after traveling for work and play. "You're anxious to get back" to the house, said Meditch, who is originally from Indiana. The two met while studying architecture at the University of Minnesota.

During their travels, the architects saw designs in cities like Rome and Berlin from which they could see for miles. It inspired them to create a design that allowed them that kind of visibility.

The architects aimed to utilize natural light and create a visually appealing space on a small site with neighbors not far away. "Sun pours in like a greenhouse," Murphey said. "Placement of the windows was crucial so you're not staring into your neighbor's home." Their challenge was to create a "sense of private spaces and not feel hemmed in," he said.



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From the moment you spot the house, you know it will be different inside.

The original boxy exterior has been changed into an L-shaped structure with the same square footage as the original. Bark adorns the front of the house. The bark panels from Highland Craftsmen wrap around the front entry ramp to the house, hinting that this house is, indeed, one of a kind.

The architects say they "struggled" to find just the kind of material for the entry, considering stucco and tile, for example, before choosing bark siding for the curve at the front of the house. The wall curves a second time as you go up the ramp. It reiterates the theme of bringing the outdoors into the interior as the bark continues inside as you move into the living room and kitchen. The material is made from reclaimed tree bark.

The three-level house plus rooftop slopes front to back with the lower-level basement office seven feet lower than the front of the house. The main level features the kitchen, dining and living room combination, with sliding glass doors opening the living area to both an interior courtyard and to the front of the house. Utilizing materials such as translucent, frosted glass in the kitchen allows natural light in but blocks the view of the house next door. It's "maximizing the sun," Murphey said. "Every room has windows on three sides." A glass floor in the living room allows light to flow into the lower level.

The second level houses the music room and the master bedroom that opens to a terrace affording outdoor space and views. This level is inviting in its own way with a room that holds two pianos and wall units for books and other possessions. The key to the light in this room, situated at the back of the house, was placing windows near the ceiling of the room — clerestories — that allow in the light but not the view. "The windows are high," Murphey said. "You see only the treetops."



The rooftop terrace has trees and a vegetable garden. (Photo by Michael Moran/OTTO)

As they did for the rooms on the main level, the architects chose monochromatic color schemes: lime green for the music room and predominantly white for the master bedroom and bath. Downstairs, on the main level, the living area is orange and beige. On the lower level, next to their office, is additional room with a red color scheme. Square footage totals 3,200, including the lower level.

On the third level is space that can be converted into two bedrooms with a sliding partition. The resulting two spaces have been used as bedrooms for their now-grown children, ages 25 and 28.

Another feature of the house, known as Trees on the Roof for the trees and vegetable garden on the rooftop, is its energy sustainability. A canopy of trees that grow from the ground below encircles the rooftop. Planters on the roof are large enough to grow 20-foot trees, and soil is deep enough to sustain broccoli, cauliflower and tomatoes.

Two Japanese maple trees — one red, the other green — provide a low canopy that shields the architects from the sun when they are seated up on the roof. "We're up there every day," Murphey said.

"You're up there under the tree canopy," Murphey said. "The trees shade you from the sun."

He prefers the roof in the evening but says "there's always a breeze up there."

The vegetable soil bed is 14 inches deep to accommodate broccoli because it requires the most depth, Murphey said.

Planters for the trees are five feet deep, five feet wide and 12 feet long.

Solar panels, a geothermal well in the ground, radiant heating and insulation create energy efficiency. Half of the electrical needs of the house are met by the solar panels. In addition, sensors have been installed on the roof to automatically tilt the louvers that cover interior windows and doors when the temperature reaches a pre-set level.

Recycled shredded blue jeans — commercially sold — provide insulation. A perforated aluminum staircase connects the levels. In an effort to make the best use of space, the bathrooms convert into showers.

A wood-fired pizza oven and a raised herb garden make cooking fun and functional.

The house has such broad appeal that it has been featured on annual neighborhood house tours. "We weren't trying to match what was next door," Murphey said. "That was never an issue, to fit in."



Solar panels, a geothermal well in the ground, radiant heating and insulation create energy efficiency. (Michael S. Williamson/The Washington Post)