

Best all around: Universal, green and healthy

by Robin Brinkley

Can a house change the world? Rosemarie Rossetti thinks so.

That's why the internationally recognized speaker, trainer, consultant and writer and her husband, Mark Leder, are building a national demonstration home and living laboratory in suburban Columbus.

Their 3,500-square-foot ranch is expected to cost about \$1 million and is so exceptional it has a mission statement: "To bring about awareness of the quality of indoor and outdoor lifestyle through universal design, green building, safety and healthy home construction practices to the public, construction and design industries."

"I think the concepts of universal design and green building practices are becoming mainstream," Rossetti says about her impending new home. "I hope one day that whole communities can be built like this."

If so, it is hoped the other homeowners won't share her inspiration. Rossetti was paralyzed from the waist down in 1998 when a tree fell on her.

Ever since then, she has become an advocate for universal design, which incorporates barrier-free spaces with wider halls

and doorways — important for people with disabilities — but without stigmatizing solutions such as ramps.

"First and foremost, this house is about accessibility," Rossetti says. "While we're at it, we thought why not make it green, too?"

Don't be fooled by that statement. The green features run the gamut from Icynene insulation, a foam spray made from soybeans, and Low-E double-paned windows with argon gas to a rainwater collection system that can be used for irrigation.

Rossetti and Leder are so serious about green building practices that they intend to

have the home certified in the U.S. Green Building Council's Leadership in Energy and Environmental Design for Homes program. The LEED green building rating system is a third-party certification program and a nationally accepted benchmark for the design, construction and operation of high-performance green buildings.

They also plan to apply to have the house certified by the National Association of Home Builders National Green Building Program.

Most people associate green with energy conservation and recycling. The national demonstration home — guided tours will be offered and much of the basement will serve as a training room for groups interested in studying both universal design and green construction — will feature both.

A key element in energy conservation is structural insulated panels used in place of wood framing for the exterior walls. SIPs, manufactured under factory-controlled conditions, feature a core of rigid foam plastic between the interior and exterior sheathing.

"They are strong and a big upgrade in energy efficiency," Rossetti says.

Passive solar also will play a key role in heating and lighting the home. What looks like a second story in renderings is not actual living space but space for windows. The home also features skylights and an 8-foot chunk of exterior wall in the master bath that's made of glass block. The glass wall faces an interior partition that allows natural light into an interior powder room.

"We looked into photovoltaic cells to provide electrical energy for the whole house, but they were too expensive," Rossetti says.



► Rosemarie Rossetti and her husband, Mark Leder, find a large lot in a rural setting for their accessible dream home.

▼ Inspired by famed architect Frank Lloyd Wright, Patrick Manley designed the universal and green home with a roof that includes a clerestory and a portico at the front entrance. (Rendering courtesy of Manley Architecture Group.)



The home will have two heat pumps and two air conditioners, with the HVAC system divided into four zones. "They will all be on timers set on different temperatures," she adds. Fans will run continuously through the ductwork to keep air circulating and to even out areas of cold and warmth.

Other energy-saving measures include LED lighting, Energy Star appliances, photovoltaic cells for outdoor lighting and a metal roof. The roof, made of recycled aluminum cans, has a life expectancy of 50 years.

"We anticipate our energy bills will be no more, and maybe less, than they are now in a 2,200-square-foot house," Rossetti says.

Another interesting feature of the roof: there will be no gutters. Runoff will be channeled through a perimeter French drain system into a holding tank in the ground to use for irrigation.

A sometimes-overlooked facet of green construction is the health benefit. Paints and sealants in the national demonstration home will emit little or no volatile organic compounds, while the kitchen and bath counters will feature Microban to inhibit the growth of mold and bacteria.

All floors will be hardwood, tile or linoleum. Carpet is notorious for harboring dust mites and molds and — just as important for Rossetti — is harder to navigate in a wheelchair.

How easy is the house to navigate? Come see for yourself. The home will be open to the public for a month after construction and by appointment in groups after that. Ticket sales will benefit research into spinal cord injuries at The Ohio State University. An extra wheelchair will be available for tours.

"I want people to see how this house makes mobility easier," Rossetti says.

Rossetti and Leder are serving as their own general contractors with help from UBuildIt, a national firm that helps people who want to build their own homes. Rossetti is hopeful that construction will start in the fall.

A home like this isn't for everybody, but only because of the price. But the green and universal design products are readily available.

"We've hit the tipping point as far as awareness in the building community and the public for green construction," Rossetti says.

How can builders benefit from the national



▲ One of the most critical design areas in a home is the kitchen. Among universal design features are a side-by-side refrigerator; a cooktop with open knee space and varied-height counters. (Rendering by Brian Pickard of Pickard Design Ltd.)

demonstration home?

"Consumers are savvy," Rossetti says. "They want value. They also are environmentally conscious. They are looking for homes that are energy efficient and healthy to live in."

The increased costs of universal design could be a tougher pitch, but Rossetti urges builders and buyers to think long term.

"People often think green but ignore social sustainability," she says. "That's where universal design comes in. It allows older people to

stay in their homes longer and that can be a huge cost saving over having to move to a nursing home."

Rossetti hopes more than 100,000 people will view the house, either in person or virtually at the Web site www.UDLL.com.

"I want it to be a catalyst for change around the world," she says.

(Robin Brinkley is a free-lance writer and educator living in Virginia Beach, Va.) 🏠

BWC board lowers group rating discount

The Ohio Bureau of Workers' Compensation board of directors voted to reduce the group-rating discount from 85 percent to 77 percent effective July 1, 2009. Additional actions taken by the BWC board with an impact on Ohio employers include:

- Capping premium increases due to these changes at 20 percent each year for affected employers;
- Capping premium increases due to an employer's claim history at 100 percent each year for all employers, and
- Development of new, performance-based premium discount plans such as deductibles that will encourage employers to manage costs and improve workplace safety efforts.

These actions help soften the blow of increasing premium, however the bureau's decision to reduce the discount still means most group-rated employers will be paying 20 percent higher premiums than presently and as much as 70 percent more than they were paying last July.

Also, the bureau's long-term plan calls for reducing the maximum premium discount to 65 percent by 2010. According to BWC, reducing the maximum group-rating discount over the next two years will allow a 25 percent reduction in the overall Ohio base rates.

Compensation Consultants Inc. is participating in a coalition of association sponsors and third-party administrators to communicate directly with the governor and BWC leadership on this issue. The coalition also has commissioned an independent actuarial review of the BWC policy reforms and Ohio's group-rating program. To their credit, BWC's board and administrator have expressed a willingness to incorporate input from the actuary's report, which will be completed in the next two months. 🏠