

How 'Green' Can a Huge House Be?



The home has been built with environmental certification in mind, despite its large size. Douglas Healey for The New York Times

NORTH STAMFORD, Conn.

THE steeply sloped cedar-shingled roof of the model home at Windermere on the Lake shelters roughly 7,000 square feet of living space, a respectable amount of room in this privileged suburban corridor between Pound Ridge, N.Y., and Darien, Conn.

The house has five bedrooms and four baths, as well as fancy features like a home theater, wine cellar and mirrored exercise room.

It is the first of 24 homes planned for a development named after an area in the English Lake District, and built in a style meant to evoke 19th-century English country houses.

Set on 74 partly wooded acres with a private lake, Windermere promises to be very lavish and, believe it or not, very green — as in energy-saving and

preservation minded.

Windermere is the first project of NRDC Residential, a new division of the National Realty and Development Corporation of Purchase, N.Y., which wants to develop a niche as a builder of “architecturally driven, planned communities with an environmental consciousness,” said Mark Robbins, the division president.

With the help of the United States Green Building Council’s Leadership in Energy and Environmental Design program, known by its acronym, LEED, NRDC Residential hopes to present large luxury homes as environmentally friendly.

Yet the goals of spare-no-expense luxury (homes at Windermere start at \$3.2 million) and environmental awareness seem unlikely when combined. After all, can a four-level house with a three-car garage and a kitchen full of energy-hungry Sub-Zero and Wolf appliances truly qualify as a model of environmental responsibility?

NRDC is trying to prove that it can, by applying for LEED certification. But even that stamp of approval may ultimately be questionable: Although LEED is generally considered one of the toughest green standards because it requires third-party verification, its overseers at the building council in Washington acknowledge that their willingness to certify expansive houses is controversial.

When the “LEED for Homes” standards were under development, “there was a huge debate about that, one that went on throughout the pilot program,” said Michelle Moore, a senior vice president of the council.

The standards released in December settled on a “home size adjustment” formula that makes it progressively harder for homes larger than the designated average (2,850 square feet for a five-bedroom house) to meet LEED thresholds in categories like energy efficiency, indoor air quality and

minimization of construction waste. Smaller houses, on the other hand, are rewarded with lower thresholds.

So, for example, a 2,500-square-foot three-bedroom house would have to earn about 30 points to qualify for the basic level of LEED certification (higher thresholds are called silver, gold and platinum), while the Windermere model home has to earn closer to 60 points to compensate for its size, said Matthew Nielsen, the project's development manager.



Mark Robbins, president of NRDC Residential of Purchase, N.Y., in the model home at Windermere on the Lake.
Douglas Healey for The New York Times

(The Windermere developers are seeking only basic certification.)

That doesn't necessarily mean making the house any less luxurious — but it does mean spending more money.

The typical low-flow shower head, “a cheap credit” used by affordable-

housing developers seeking certification, is not an appealing option to upper-end home builders, said Maureen Mahle, program manager for Steven Winter Associates Inc., a Norwalk, Conn., design firm that consults on residential and commercial LEED applications. They are more likely to install pricey high-tech devices that improve quality of life and enhance the project's appeal.

All of Windermere's homes will be built to basic LEED standards. The only optional green element is a \$100,000 geothermal system — which uses an electric pump to transfer heat from the soil to the house in the winter, and from the house to the soil in summer. In the model house, the geothermal system is enhanced by an energy recovery ventilator, an air circulation device that tempers incoming fresh air with outgoing exhaust air, further reducing heating and cooling costs.

Coupled with the house's high-performance insulation, the overall technology investment will reduce heating and cooling costs by 50 to 75 percent compared with a similarly sized house of traditional design, Mr. Nielsen said.

Other credit-producing features include formaldehyde-free kitchen cabinetry, paint and carpeting with very low levels of noxious chemicals, and oak plank flooring bought from a provider certified as a practitioner of sustainable forestry by the Forest Stewardship Council, also in Washington.

Aside from its price tag, this is painless conservationism, a point emphasized in the developer's promotional materials: "Imagine having it all, while preserving the environment."

Darek Shapiro, an environmental architect who ran for mayor of Stamford several years ago as a Green Party candidate, praises the project's design for drastically reducing the environmental impact of people who would be unlikely to downsize to save energy.

Michael N. Trolle, a principal in BPC Green Builders, in Georgetown, Conn.,

and a volunteer advocate for LEED for Homes, is less certain. “Personally,” he said, “I’d rather see homes significantly smaller than that.” Yet, he acknowledged, he is building a 5,000-square-foot green home for New Canaan clients.

NRDC Residential’s conservation efforts extend to the development site, which is in a watershed. A specially designed storm-water management system will filter runoff from roads and driveways. Gardens will have drought-tolerant plants. The company has also donated 25 acres of the property to the Stamford Land Conservation Trust.

LEED certification for the first house isn’t a sure thing. The developer is finishing the final paperwork for the application and hopes to have certification in hand by late May.

Gail Okun, a neighbor and an opponent of the development, won’t be swayed even if it does receive certification. Ms. Okun said she was worried about the impact on the water supply and “brokenhearted” about how much land had been cleared.

“Do we think they’re protecting the environment?” she said. “Not in any way.”