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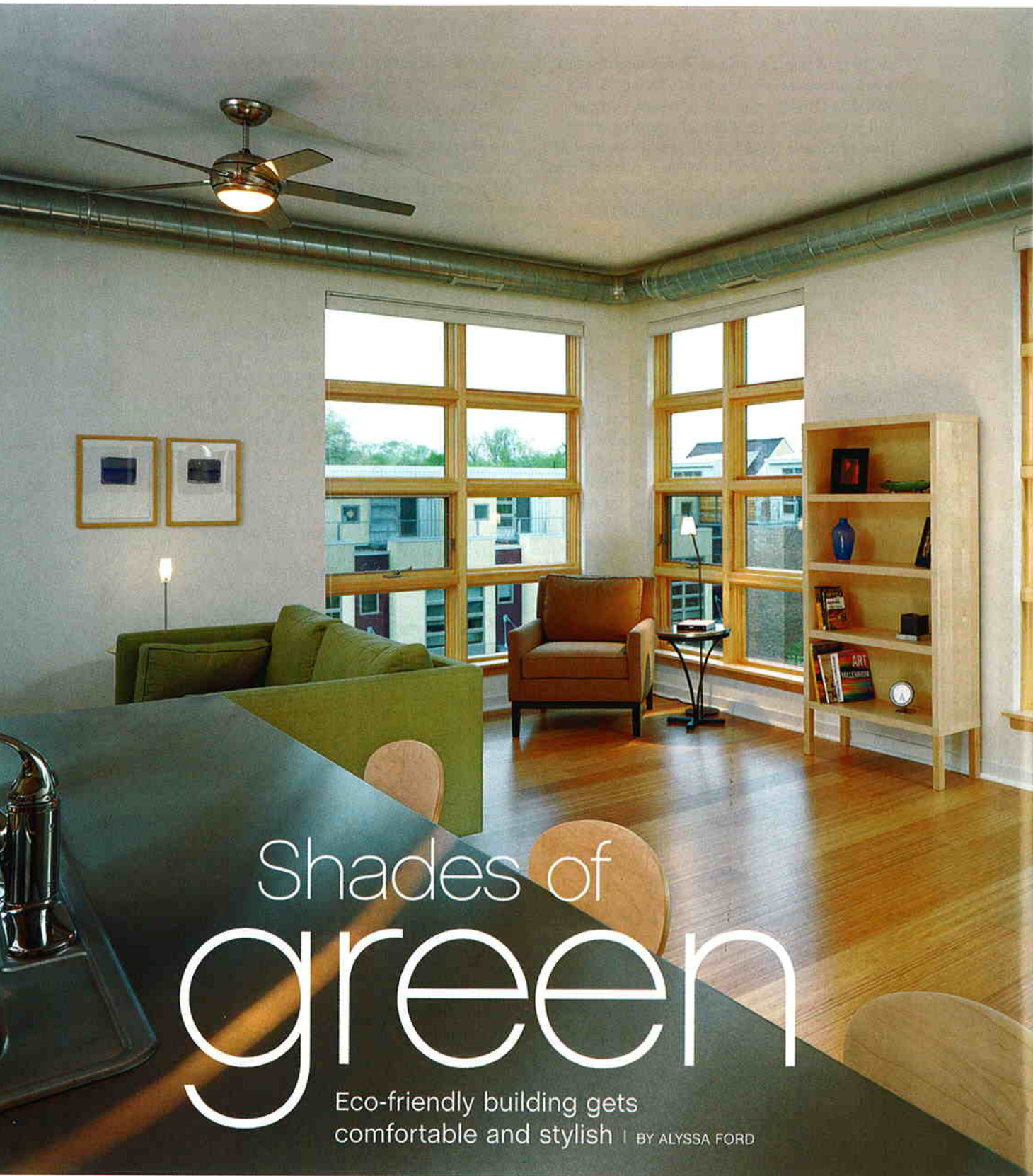


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Monthly

TopArchitects

2006 Honors

"Green" Grows Up | Lakefront Beauty | Taste of the Emerald Isle



Shades of green

Eco-friendly building gets comfortable and stylish | BY ALYSSA FORD

ABOVE Eco-finishes abound in the Midtown Lofts: high-efficiency windows, low-flow faucets, and low-VOC paint. RIGHT A wall separation made of organic materials—including actual grass—closes off the bedroom.



At first glance, the appeal of Reflections at Bloomington Central Station is mysterious. The two-tower condo development sits on a 50-acre asphalt site; jet engines scream overhead, and units have no balconies or working windows (the better to avoid the ear-splitting 95 decibels from the nearby airport). Since the towers are the first phase of a major development, residents will live in a construction zone for 10 to 15 years. And they have no guarantee that their floor-to-ceiling skyline views won't eventually be lost as construction continues.

Yet the glass-sheathed project has been an overwhelming hit with condo buyers. More than eight months before its scheduled opening in August, 225 of 262 units had been snatched up.

The allure, according to project developer McGough Construction, is the condo's sound- and temperature-insulating building envelope, state-of-the-art air-purification system, and prime location on the Hiawatha Light Rail Line—between the airport and the Mall of America, and just north of the Minnesota Valley National Wildlife Refuge. Marketed as Minnesota's most environmentally friendly and transit-oriented residential development, it makes perfect sense to certain buyers. "We were so jazzed about Reflections, we signed up five minutes after we saw the model," says Jim Meyers, a future resident. "We're excited about being on the light rail, about being near the nature preserve. And with energy prices the way they are, you know, everyone's concerned about saving a little money."



PHOTOS THIS PAGE BY ALEX STEINBERG

THE APPEAL OF GREEN

Like Meyers, a growing number of Minnesotans are embracing “green building”—an elastic term used to describe everything from sustainable home design to mixed-use urban planning to eco-accoutrements such as organic cotton pillows. “Green” can be as simple as an energy-efficient light bulb or as complicated as a system that uses geothermal energy to heat and cool a house.

“Green building is really a lifestyle,” says Michael Lander, a proponent of eco-friendly development and principal of the Lander Group, a Minneapolis condo developer. “More people are learning that a car-independent, high-density building in the middle of a city is much more efficient than a solar-powered yurt in the middle of a cornfield.”

The attraction of that lifestyle has spread beyond the commune and Earth-shoes set. In fact, the growing popularity of going green may have less to do with its idealistic goal—saving the planet—than with its proven cost-effectiveness and demonstrated health benefits for people with allergies, asthma, depression, and Seasonal Affective Disorder.

Environmentalists have touted green building since the first Earth Day in 1970. But it’s only now—after nearly 36 years—that green home building is on the cusp of becoming a trend.

The annual Living Green Expo, to be held at the Minneapolis Convention Center in May, drew some 14,000 people last year—a 33 percent jump in attendance over the previous year. In January, Shelter Architecture, a Minneapolis firm, broke ground on a state-of-the-art home in Golden Valley that is expected to be one of the first single-family residences in the country to be certified by the U.S. Green Building Council’s Leadership in Energy and Environmental Design program (often known by its acronym, LEED).

“Green building is bigger than it ever has been,” says John Dwyer, principal of Shelter. “We market ourselves as a green architecture firm, and now we’re getting 10 to 15 leads every week, which is very encouraging.”

ECO-LUXURY

Homeowners are beginning to recognize that going green need not involve monk-like deprivation. Today’s green homes not only minimize environmental impact and embrace simplicity, they are comfortable and sophisticated as well.

Medora Woods’s carefully sited house in St. Louis Park, for example, is so filled with natural light on a typical day that she rarely feels the need to turn on lights. With gleaming woodwork, double-thick walls, high ceilings, and deep storage cabinets along every hallway, Woods’s 2,200-square-foot modernist home pleases the eye as well as the ozone layer.

In place of the pioneer-era, energy-saving techniques once favored by hard-core environmentalists, Woods’s home, designed by architect Sarah Nettleton and completed in 2004, uses several convenient high-tech systems. Her geothermal air-intake system moves fresh air through 70 feet of underground pipe buried in the front yard. The constant 50- to 60-degree internal temperature of

the earth moderates the air, so less energy is needed for heating or cooling. Her high-velocity air-conditioning system accelerates the speed of the air going through the air ducts, so less energy is used in summer. Plus, her in-floor radiant heating system is powered by hot water and can be zoned to specific rooms. All in all, Woods’s home is exceedingly comfortable and 30 percent more efficient than state energy guidelines specify.

“People seem to be surprised that eco-friendly isn’t a mud building with bulky solar panels,” says Wren Aigaki-Lander, marketing director at Lander Group. Lander’s Midtown Lofts in Uptown offers multiple green finishes including recycled fiber carpet squares, recycled rubber flooring, and dual-flush toilets. “People would come in and comment, ‘Oh, this is green? But it’s really, really nice!’” she says.

Even solar panels—eco-friendly staples long considered effective but ugly—have gained aesthetic ground. Jim Jacobson and Jane Garvin hired Against the Grain, a Minneapolis firm, to remodel their home in Minneapolis’s Seward neighborhood so that their single gable roof would face south and accommodate 18 flush-mounted photovoltaic solar panels. They were so pleased with the look of their new roof, they asked the firm’s principal, architect Richard Venberg, to construct a staircase leading to a perch near the roof so guests can see the vivid, cobalt-blue solar panels up close. Constructed of reclaimed pine and copper, the staircase winds around the trunk of a dried ash tree—creating a dramatic setting, as well as a conversation piece.

HEALTHY PAYBACK

Green building not only looks good, it’s good for you. Some builders even report that their most ardent green supporters are doctors and nurses.

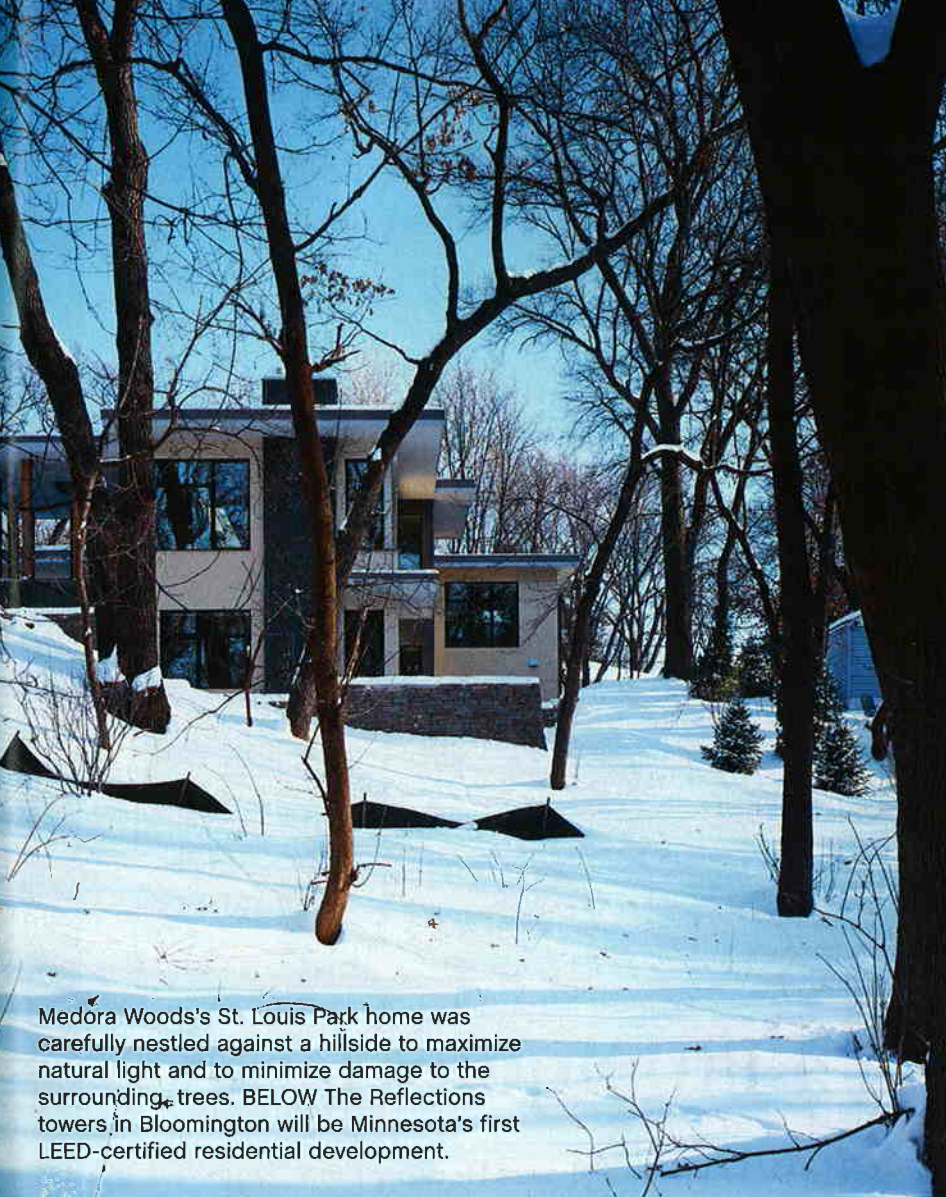
In Bloomington’s Reflections development, for example, the towers are encased in tightly sealed building envelopes and have high-powered ventilation systems. Each unit receives heavily ventilated air that’s free of pollutants that can cause respiratory problems, allergies, and asthma.

Garvin and Jacobson lack such a flashy ventilation system, but they have eliminated many harmful chemicals—often referred to as volatile organic compounds or VOCs. They were careful to choose formaldehyde-free insulation for their new roof. And most of their flooring is reclaimed wood, which avoids the dust and dust mites of carpeting.

So what’s the drawback to green building? Cost has been cited as one stumbling block, but it’s not as bad as you might think.

According to a widely accepted 2003 study by the Sustainable Building Task Force, green buildings that met LEED criteria cost just 2 percent more on average than similar structures built to conventional standards. If there’s any significant sting to the pocketbook, it comes with alternative energy systems, which tend to be pricey on the front end and yield savings slowly, especially in states with relatively low energy costs, like Minnesota.

Garvin and Jacobson’s photovoltaic system cost \$25,000, and even with their \$6,000 rebate from Xcel Energy for adding the panels in 2003, the investment won’t pay off any time soon. (Had they installed this year, they might



Medora Woods's St. Louis Park home was carefully nestled against a hillside to maximize natural light and to minimize damage to the surrounding trees. BELOW The Reflections towers in Bloomington will be Minnesota's first LEED-certified residential development.

have been eligible for an additional \$2,000 federal tax credit.) Unlike Californians who pay an average of 12.5 cents per kilowatt hour for electricity and recoup the cost of solar panels in 10 years or less, Minnesotans pay less than half that rate and measure payback in decades.

Likewise, Woods's high-efficiency systems cost thousands of dollars. But she estimates they save her more than \$100 each month in energy costs, compared with bills in her former house.

Architect Nettleton, a local green building expert, takes a pragmatic view of going green. "When it comes down to it, it's all a matter of priority," she says. "Granite counters will buy you a [geothermal] system."

We Minnesotans tend to suffer from "affluenza," she points out: We don't have to face the monetary consequences of failing to conserve energy. "But at some point, that's going to change," she says. "And the people who are already making the smart decisions will be mighty glad they did." **MH**

ALYSSA FORD IS THE EDITORIAL ASSISTANT AT *MIDWEST HOME*.

FOR MORE INFORMATION ON RESOURCES FEATURED IN THIS STORY, PLEASE TURN TO PAGE 124.

Getting Started

More intrigued than knowledgeable about going green and sustainable building? Here are some resources that can help.

MINNESOTA CHAPTER OF THE AMERICAN INSTITUTE OF ARCHITECTS, COMMITTEE ON THE ENVIRONMENT

Works to develop sustainable-design guidelines. A good resource for finding environmentally minded architects. Contact AIA Minnesota at 275 Market St., Suite 54, Minneapolis, 612-338-6763, or visit www.aia-mn.org.

MINNESOTA OFFICE OF ENVIRONMENTAL ASSISTANCE

Advice and resources on green building in Minnesota. Contact at 520 Lafayette Rd. N., Floor 2, St. Paul, 651-296-3417, or visit www.moea.state.mn.us.

MINNESOTA RENEWABLE ENERGY SOCIETY

Advocates for the use of renewable energy in Minnesota, and organizes an annual solar home tour and workshops for homeowners. Contact at 2928 Fifth Ave. S., Minneapolis, 612-308-4757, or visit www.mres-solar.org.

SOUTHEAST COMO IMPROVEMENT ASSOCIATION

Currently working with Twin Cities homeowners to organize discounts for solar panels through Innovative Power Systems. Contact at 187 15th Ave. SE, Minneapolis, 612-676-1731.

XCEL ENERGY'S WINDSOURCE PROGRAM

For a small additional fee, Xcel Energy's electric customers may opt to have their dollars used to support wind- rather than coal-generated energy. Contact Xcel Energy at 414 Nicollet Mall, Minneapolis, 800-895-4999, or visit www.xcelenergy.com.