



## Taking It to the Trees

Barerock is a low-impact retreat with few civilized comforts apart from the large reflective windows salvaged from two Toronto office towers.

**Harried urbanites usually dream of the sort of rustic old-fashioned cottages found in the pages of an outdoor clothing catalog, but not Dan and Diane Molenaar.**

When these owners of an upscale Toronto menswear boutique designed their private retreat, they envisioned a low-impact cabin that would blend into the forest.

Named Barerock, the Molenaars' three-season 900-square-foot lakefront dwelling is encased in mirrored windows that offer sweeping panoramic views of the surrounding forest. Built 70 feet above Drag Lake, near Haliburton, Ontario, and constructed on 14 concrete piers anchored to the bedrock, the one-story structure appears to be suspended amidst the trees.

In 1999, the Molenaars had chanced upon the perfect lot for a private retreat, just two and a half hours north of Toronto. The six-and-a-half-acre plot boasted stands of white pine and oak trees and a rocky 850-foot-long shoreline. But it lacked a few essentials, such as a drinking-water supply, electricity, and a road (the only way to

reach Barerock is via a five-minute boat ride). The couple was undaunted by these drawbacks. "I spent a lot of time as a teenager doing long wilderness camping trips, so living off the grid didn't seem like an issue," says Dan.

But things got tricky when the Molenaars decided, without any prior experience, to design and build the cabin themselves. They studied back issues of old magazines, and found that they were drawn to Frank Lloyd Wright's flat-roof Usonian homes of the 1930s and '40s. Built symbiotically with nature, Wright's affordable Usonians featured open plans that incorporated natural materials and lighting. Inspired by their discovery, the Molenaars started designing.

Dan, who once worked as a carpenter at a nuclear power plant, rounded out his skills by taking courses in renewable energy and architectural drafting. He completed the conceptual and technical drawings for the cabin, then enlisted the help of structural engineer David Bowick. "Modernism can be a real fetish. And it can be ►





Barerock's minimal interior is augmented by a built-in dining area made from African padauk, a decay-resistant hardwood. The mirrored kitchen wall echoes the exterior's distinguishing feature.

extremely complex or it can be simple," says Bowick. "Dan made it simple."

Dan and Diane knew they wanted their cabin to have large windows, and one day, by chance, they heard a radio interview with a recycler who was in the process of reclaiming 4,000 windows from two Toronto office towers. Within hours, the Molenaars had ordered 40 of the highly reflective bronze pieces, each weighing 90 pounds and measuring five by six feet. As Dan notes, "The thought of taking glass that office workers had viewed the city through and setting it down where it could afford views of unspoiled nature was irresistible."

In addition to providing natural lighting, the reflective windows have other benefits. Deer walk right by the cabin, unaware that they're providing a free wildlife show for the Molenaars and their Jack Russell terrier, Nigel. After the sun sets, and the interior can be seen from outside, the owners light candles which make the cottage glow like a huge lantern.

Designed without any finicky finishes or stains that

require periodic touch-ups, the exterior of the 15-by-60-foot cabin is clad in dark bronze-colored aluminum composite paneling to complement the bark of the surrounding trees. The flat roof is supported by Douglas fir columns attached to Douglas fir beams, and covered with a rubber membrane expected to last up to 40 years.

"In many cabins, there's too much structure and citified comforts. We provided ourselves with the comforts we need, not the comforts most people think we needed," says Dan. As a result, Barerock has a simple floor plan, devoid of molding, trim, or doors. At one end of the cabin are the bedroom, pantry, and enclosed bathroom with sink and shower; at the other end is the living room. (A glass-roofed outhouse is 60 feet away.) In between is a kitchen island, dining table, and benches, all made onsite from African padauk, a decay-resistant hardwood.

Woodstoves, outfitted with self-powered Ecofans, heat the cabin. Water for showering and washing is drawn from the lake to a 65-gallon pressurized tank using a pump that doesn't require constant power to operate. ▶





The cabin's low-impact mandate extends to its rechargeable Bose stereo, and on-demand propane water heater and refrigerator. Even the urbane 19,000 BTU commercial-grade Wolf stove has been converted from natural gas to propane—an indulgent concession. Wiring was installed in Barerock in case electricity is used in the future; it currently isn't.

The cabin, which took two years to build, and cost less than \$165,000, has opened up new opportunities for the enterprising couple. In 2004, the Molenaars started Mafco House, a design and project-management company, to help others build their own low-impact contemporary cottages.

Business concerns, however, take a backseat to hiking and relaxing at the property. Although Barerock is just a few hours and a boat ride from the heart of downtown Toronto, its privacy and peacefulness are an entire mindset away. "It makes you appreciate life a little differently," says Diane. "You notice a lot more waste when you're back in a big city." ■

## What a Drag

Barerock's low-impact minimalist charm is due in part to its rugged location on secluded Drag Lake. The lack of road access ruled out the use of heavy equipment to construct the house, and just getting the materials to the site required major effort. (The topography had stymied previous generations of loggers who harvested the surrounding area, but left the Molenaars' property untouched.) "The whole challenge of figuring it out was amazing," says Diane.

After an aborted attempt to airlift material to the property using a helicopter, the Molenaars settled on using a boat and their free-floating dock to haul supplies to shore. But they still had to move everything uphill—164 sacks of concrete weighing 60 pounds each, Douglas fir beams, two woodstoves, reclaimed windows, and the massive stainless steel Wolf gourmet stove. The couple considered hoisting material up to a deck before devising a simpler solution: Dan recruited his 24-year-old son Alex and four of his friends to carry everything by hand.

There was a bright side to the hard labor. "At the end of the summer, we were ripped," says Dan with a chuckle.

