



Downsize and Simplify

BY ROB YAGID

In many ways, Nico and Ellen are not unlike others of their generation. Years ago, they worked hard to buy a house in downtown Freeport, Maine, where they could settle and raise a family. They did so, bringing up three children in a charming old village Victorian that needed and received lots of work over the years. The family grew together in that house, and then their kids got older and went off to college and on to lives of their own. As empty-nesters, Nico and Ellen were left with a house larger than they needed and, subsequently, with energy bills and a maintenance list larger than they

wanted. They had arrived at the moment where many other baby boomers have found themselves, or soon will: Their home no longer fit the life they lived.

This wasn't a surprise. Nico and Ellen had been dreaming of downsizing and of living in a house as considerate of the earth's resources as they were. That meant building a small, low-energy, and low-maintenance home. They had already purchased a lot a couple of miles outside of town on a bluff above the Cousins River, a meandering tidal river that brings abundant wildlife and the qualities of the

EDITOR'S CHOICE

Our editor's choice award goes to GO Logic principal Matt O'Malia and project architect Gunther Kragler for the modern near-zero-energy house they designed in Maine. This is an example of how contemporary design can be married to exceptional building techniques to create a comfortable, low-impact home within an approachable budget.

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This compact near-zero-energy home is designed for those looking to live well with minimal impact

coast they love so much right to the fringe of their property. They restored a meadow that had been overtaken by forest, and in the middle of it they built a 1600-sq.-ft., modern, near-zero-energy home tuned to its environment and to the next chapter of their lives.

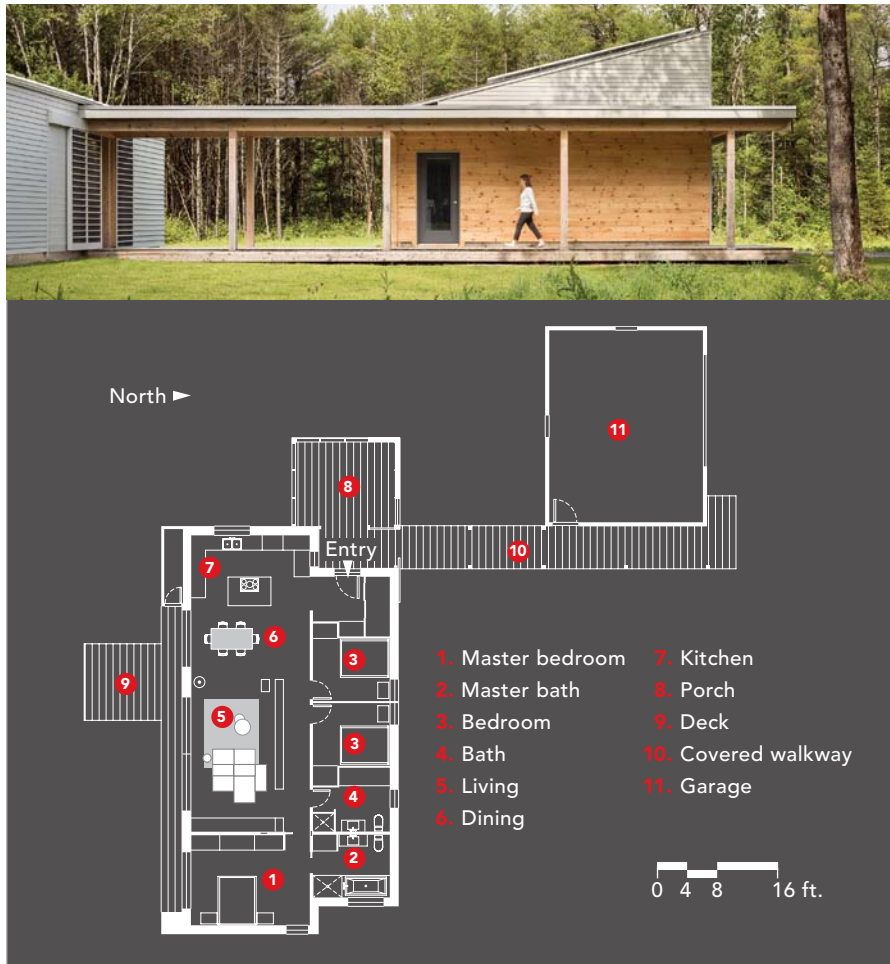
Looking at this new home designed and built by the Maine firm GO Logic, you are confronted with a carefully considered design that is both smart and sensible. The home's basic form, pared-down details, limited material palette, and inviting, naturally lit living spaces evoke a comfortable, modern style. And though it departs from a conven-

tionally built house in many ways, none of it is overly complicated or out of reach. You may very well allow yourself to think, "I can build that."

You would be absolutely right. You can—and here is how.

Be inspired by design in all its forms

Nico and Ellen had first seen GO Logic's work on the cover of a regional design magazine. The GO Home, one of the firm's first projects, was a small LEED-Platinum-certified Passive House. The cou-



ple fell in love with the home's style and its performance. The aspects of its design mirrored how they were hoping to live. They sought the firm out, despite having already talked to another potential builder.

Nico recalls the initial conversation with principal Matt O'Malia and project architect Gunther Kragler: "When it came to efficiency, which was important to us, the first builder seemed to just be adding it onto his standard building package. Matt and Gunther seemed much more knowledgeable, and efficiency seemed completely integrated into the design of their home." Nico and Ellen, though not versed in performance building, recognized something critical in home design during that conversation: Successful homes are designed as systems, and not as sets of disparate parts and assemblies.

GO Logic's strategy is straightforward: Design contemporary houses that are simple

in shape and plan, which makes them less costly and easier to build, insulate, and air-seal. The firm allocates a larger than average percentage of a project's budget to the shell of the house—thick, well-insulated walls and roofs, and top-performing windows. This allows for a mechanical system that is greatly reduced in size and complexity, which helps keep the up-front building budget in check while ensuring low long-term operating costs in the way of minimal energy bills.

Choose logic over convention

With GO Logic's general style and performance approach grounding the project, Matt and Gunther asked Nico and Ellen for a list of the features they liked in the homes of their friends and family members. Single-floor living appealed to them, as did a seamless flow between the kitchen and indoor and outdoor living spaces. Though Nico and



SPECS

Bedrooms: 3

Bathrooms: 2

Size: 1600 sq. ft.

Cost: \$215 per sq. ft., excluding site work, walkway, and garage

Completed: 2014

Location: Freeport, Maine

Architect: Matt O'Malia and Gunther Kragler, GO Logic, gologic.us

Builder: Alan Gibson, GO Logic; Isaac Wood



WOODSTOVE
Morso

PENDANT LIGHTS
Cleo Pendant
by Tech Lighting

Living lightly. The living room is bookended by a custom ash daybed and accent wall, which is just one of a few touches in the house that denote a Scandinavian style. The room is daylit by a wall of glass doors to the south, and a custom built-in bookcase serves as an important focal point to the north.



CABINETS
Custom by David Sprague

COUNTERTOPS
Fresh Water Pearl Granite
by Freshwater Stone

Casual elegance. The kitchen carries the contemporary styling of the house and is organized for efficiency, storage, and everyday food prep and entertaining. Its openness not only improves the comfort of the kitchen but also that of the adjacent dining and living area.

Ellen would live in their home alone much of the time, it still had to accommodate visitors. These demands guided the siting and layout of the home.

Upon approaching the house, the first element you encounter is the garage. As Gunther acknowledges, “It’s not always the most beautiful element, but it helps start an important procession to the entry.” Having the garage in such a forward position creates a stark transition between the frenetic pace of the workday and the quiet and peace of home. The garage also provides privacy, and because it’s completely detached from the house, it ensures better indoor-air quality.

The front door, accessed by a short walk beneath an elevated covered walkway, sits beyond a sliding wooden screened and slatted door to the porch. This sliding door can be closed in the summer, allowing the front door to be left open, which helps realize Nico and Ellen’s desire for seamless indoor and outdoor living when the weather allows.

The floor plan, based on one of GO Logic’s stock designs, is basic but hardworking. The master bedroom, the kitchen, and the dining and living areas are along the southern wall of the house, which has lots of glass for natural daylighting, solar heat gain, and views of the property. All of the compact public spaces sit beneath a continuously vaulted ceiling, which helps make them feel bright and expansive. The guest bedrooms and bathrooms are placed along the north wall. Lowering the ceiling in these areas to a standard height creates attic-storage opportunities above, helps create a chase to run ductwork, and reduces their scale to make them comfortable.

Instead of a partition wall, a custom bookcase divides the home into public and private halves. This unit is made of ash and translucent panels. It provides privacy for the bedrooms and bathroom but allows light to pass through. Beyond its capacity to hold books and art, the unit is an important focal point.

At night, the bookcase is set aglow with integrated lighting and translucent panels that become backlit from the hall lights.

Embrace better building

The shell of Nico and Ellen’s home exceeds code-minimum construction considerably. The foundation is of GO Logic’s own design and is a version of what’s commonly called a raft slab. Thick EPS rigid foam is laid like a tray over structural fill. Once poured, the thickened-edge slab is completely isolated from the exterior environment to eliminate thermal bridging that can result in cold, uncomfortable floors and energy losses. The wall assemblies are insulated to R-50 and are made of a 2x6 load-bearing interior wall insulated with dense-pack cellulose and an outer wall made of 8¼-in.-thick structural insulated panels (SIPs).

The roof is framed primarily with trusses that accommodate 2 ft. of loose-fill cellulose to provide an insulating value in excess of



An efficient, beautiful form. The home's simple shape and peaked shed roofs lend efficiency in energy performance and cost, and its materials speak to regional influences. Clapboard siding and pine timbers used to construct the walkway and porch are just a few of the subtle details that make this project at home on its site.



DESIGN VIDEO For an inside look at this home, visit FineHomebuilding.com/houses.

R-80. With triple-glazed aluminum-clad Kneer-Sud windows and doors, the home's conditioning needs are so low that the primary heat comes from just a few small and inexpensive electric baseboard heaters. A fresh-air supply—imperative in such an airtight, well-insulated home—is provided by a Zehnder heat-recovery ventilator (HRV) that exhausts stale air from the kitchen and two bathrooms, and introduces fresh air to the living room and bedrooms. There is no need for air-conditioning in the summer months. The simple, all-electric mechanical system is supported by a 4.6kw photovoltaic array, which helps keep the annual heating costs at just \$300.

The final components of the mechanical system are the water heaters. To reduce energy use and utility costs, two 40-gal. electric water heaters were installed. When just Nico and Ellen are home, one heater keeps up with the demand. When guests arrive, flipping a switch activates the second unit.



Such smart strategies set this home apart from most others. Nico, who may not have recognized the truth in that statement before building this house, has a whole new perspective and a new message.

“If you're building a new house, you totally owe it to yourself to find a builder who knows what's possible with today's building materials and technology,” he says. “Now, when I drive by what seems to be a typical build, one that looks like it's being

built to the basic code, it just seems like such a wasted opportunity.”

We can build better, and this particular home in Maine's midcoast region is a testament to what's possible when a designer, a builder, and their clients are guided by building science's best practices and a commitment to true quality in design. □

Rob Yagid is the editor of *Fine Homebuilding*. Photos by Trent Bell.