

Concept

BY EMORY BALDWIN

This home in north Idaho puts savvy space planning and craftsmanship on display while offering an alternative to conventional home building

few years ago, I realized there had been a shift in the housing needs of Seattle, where I've been designing homes for 16 years. It became clear to me that we needed to create new housing options to address our rapidly changing community. At the time, much of the housing in western Washington did not adequately support an increase in live-in elderly relatives, caregivers, and unrelated adults. Single-person households and multigenerational households were on the rise, while traditional nuclear-family households were declining. An aging population also meant a greater number of people with physical disabilities. Unfortunately, conventional housing options generally do not respond to needs such as these, so I committed myself to designing homes that did.

I started a firm called FabCab, which designs and sells small prefab houses to be used as accessory dwelling units (ADUs),

cabin getaways, and primary homes. The houses we produce are designed to be appropriate for a wide range of people with various abilities and to be resource efficient through their low energy demands, their longevity of use, and their compact footprints. Not surprisingly, our clients have been attracted to these homes for those very characteristics, but also because the homes help to foster a comfortable and low-maintenance lifestyle.

Such was the case for the owners of this cabin, who hired Idaho-based contractor Scott Schriber to build the 550-sq.-ft. house we call TimberCab onto the west-facing slope of their steep site, which overlooks Bottle Bay on Lake Pend Oreille.

This home makes use of every square inch of floor space and is designed to feel like and to function as a much larger home. The design strategies we employed are not exclusive to this project but, rather, can be easily adapted to any small home where the goal is to achieve comfort and efficiency in a casual and contemporary style.

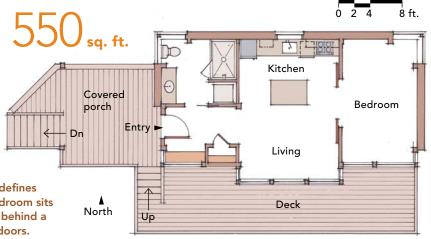
A partial prefab

One of the most notable elements of this cabin is its construction. A timber-frame skeleton and a series of structural insulated panels (SIPs) for the walls and roof were cut in a factory and delivered to the site ready to assemble. The shell of the house was flat-packed, meaning that it could be delivered to the site in a much smaller package than a typical modular home, which leaves the factory fully finished and travels down the highway as a volume that is mostly air. Flat-packing the shell proved to be a major benefit in the construction of this house, due to the complicated site access.

In addition to the timber frame and the SIPs, the house shell includes windows, exterior doors, siding, and roofing. Once the foundation was ready, the timber-frame

A STRATEGIC LAYOUT

With its seating bench and closet, the north entry of the cabin functions like a mudroom. It is placed opposite the home's bathroom, which is far larger than you would expect in a home of this size. The great room features an important bump-out. This shallow projection creates a couch space that defines the living area. The sole bedroom sits at the far end of the house behind a pair of simple sliding barn doors.



SPECS

Bedrooms: 1

Bathrooms: 1

Cost: \$300 per sq. ft., including site work

Completed: 2012

Location: Sagle, Idaho

Architect:

Emory Baldwin, FabCab, fabcab.com

Builder: Scott Schriber, Selle Valley Construction, sellevalley.com

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SMART SMALL-SPACE FEATURES

Although this home has an unusually compact footprint, it was designed to provide a living experience without compromising comfort or convenience. Nowhere is that design approach more evident than in the home's interior spaces. Here, several design strategies are used to support an ordinary lifestyle, albeit at a reduced scale.



COMPOUNDING TASKS

In an effort to make the most of every square foot, a recess for a bench was created in the entry and wrapped in windows. This simple detail allows the entry to function as a mudroom or a space to hole up with a book.

SPACE DECEPTION

The central living area seems far larger than it is due to a fully exposed Douglas-fir ceiling that rises toward the view. Windows wrap a small projection to increase daylight access and to lengthen the sightlines through the house.





Selectively

giving a

small home

big-house

spaces has

an important

impact on

how well the

home lives.

COMPACT GALLEY

A slender 24-in. Liebherr fridge and freezer anchors one end of the prep zone, which is topped with Stormy Sky honed quartz. An induction cooktop is placed at the other. The homeowners chose additional storage over a conventional oven in this small kitchen. The custom steel-and-slab table serves as a dining area and as an additional prep surface, and it allows the kitchen and living area to be somewhat flexible in size.

components were delivered and then assembled without the need for any on-site milling. Tongue-and-groove Douglas-fir planks

were installed on top of the timber rafters to create a finished ceiling and to provide a solid walking surface for installing the SIP roof panels. The intent was for the shell to be built in as little as two weeks, including the installation of the windows and doors, so that it could be dried in quickly.

Not only did the prefabrication expedite construction, but the resulting home is tight and well insulated—R-25 walls and an R-40 roof—which allows it to be conditioned by a single ductless-minisplit

heat pump. The cabin's owners also opted for radiant-floor heating in the bathroom, though primarily for comfort.

Modern design, traditional comfort

I would describe the design of this home as a marriage of modern aesthetics and traditional materials. The monoslope shed roof, large expanses of glass, and simple form are far more contemporary elements than those on the gable-roofed cabins and

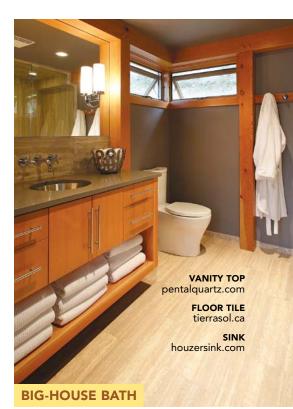
cottages typical of the area. Yet this home's use of time-honored timber-frame construction and its abundance of wood inside and out create an environment imbued with a sense of warmth that few people associate with modern design. The prolific use of Douglas fir and engineered oak flooring also helps to make the cabin feel in harmony with its mountainous location, heavily timbered valleys, and shoreline.

The few other details in the house—such as the large sculptural light fixtures and

the stainless-steel door hardware and tile backsplash—round out the home's contrasting yet complementary styles.

Creating expansive qualities

With this house, an enhanced sense of space was achieved through several design decisions. For instance, the layout of the



This bathroom, featuring Fioranese Nu Travertine tile, occupies a generous footprint and includes a large vanity, a walk-in shower, and a stacked washer and dryer.

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cabin is anchored by a great room that contains the living area as well as a combined dining space and galley kitchen. The bedroom, bathroom, and entry are organized around this core. Having the largest open space at the center of the cabin, with other spaces opening onto it, gives the entire home a more spacious feel. The idea of a central core is an organizing element in every iteration of our stock designs (see "Prefab expandable," right).

High ceilings and clear space above the few partition walls allow the entire ceiling to be visible, which highlights the home's complete volume and contributes to its spacious feel. The ceiling rises toward the view, and a wall of windows captures it, maximizing the sightlines throughout the house—a common small-home design strategy that increases the perception of space—while also providing the house with an abundance of natural light.

Among the most significant spaces of the house are its patio and deck, which expand its livable footprint when weather allows. Part of the stock design, the covered patio serves as both a covered entry and an outdoor dining space. The addition of the generous deck was a collaboration between Schriber and the homeowners. It is an ideal area for entertaining and relaxing. Wisely, the deck—which helps ground the house to its site—is dropped well below the windows of the house, creating uninterrupted views of the lake and mountains.

Broad applicability

When I first designed this home, I couldn't have foreseen it being built in the rugged country of northern Idaho. Additionally, the nature of our firm's work usually keeps us fairly removed from the build, especially when it's a flight away. But when we do get to visit projects upon their completion, I always find it to be rewarding. For me, designing any home has its challenges, but designing a small home with the hopes of it serving a variety of clients in a range of settings has been particularly daunting. Yet through successful projects like this one, our effort to create quality, broadly applicable homes that help enrich the lives of those who live in them is affirmed.

Emory Baldwin is co-owner of FabCab in Seattle, Wash. Photos by Rob Yagid.

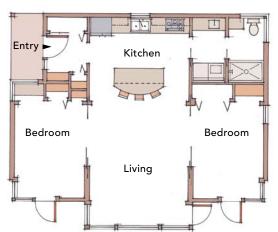
PREFAB EXPANDABLE

FabCab offers five standard versions of its TimberCab design. If more space is needed, the four additional layouts provide additional square footage rooted in the same design logic as the 550-sq.-ft. plan.

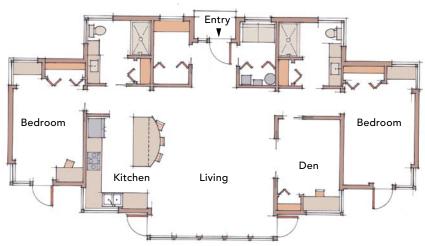
982 sq. ft.

This plan adds a second bedroom or flex space, which mirrors the primary bedroom on the other side of the living area. The kitchen is expanded to add a small island, and the living and dining areas are stretched slightly.

of the home.



Entry Master bath This plan includes a master suite and adds > Laundry Kitchen a dedicated laundry room and guest bathroom adjacent to a second bedroom. **Bedroom** The kitchen, dining, Master bedroom and living areas are Living expanded, and the entrance is moved to the low (nonview) side



This plan has two bedrooms, a den or flex space, and two full bathrooms. A walk-in closet and mudroom are added near the entry, and the kitchen is larger and now is situated on the view side of the home. The largest plan is 1850 sq. ft. and has the same layout as this plan, but its spaces are increased in size proportionally.

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