

The Second

A new house built on the small footprint of the original benefits from space-saving strategies and a modern insulation package



Before

Compact and charming.

Built on the footprint of a failing three-season house (inset), the new 1000-sq.-ft. home is both energy and space efficient. Photo above taken at A on floor plan.

SPECS

Bedrooms: 2

Bathrooms: 1½

Size: 1018 sq. ft.

Insulation: R-29 (walls); R-49 (roof)

Location: Vineyard Haven, Mass.

Architect/builder: South Mountain Co. (Laurel Wilkinson, lead designer; Aaron Beck, lead carpenter)

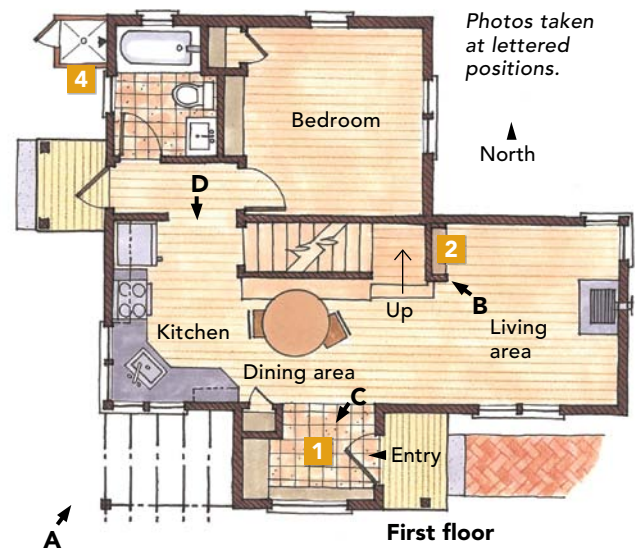
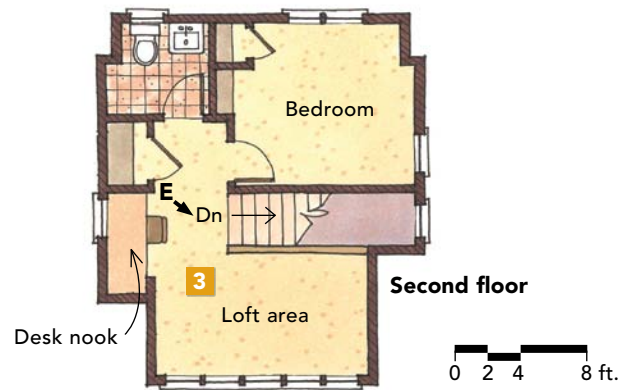
Time Around

BY CHARLES BICKFORD

The tiny house wasn't that old, but it was failing fast. Built in 1950 by an industrial arts class at Martha's Vineyard High School, the house sat on a depression that didn't drain; consequently, it was rotting away. It was a tough situation for Ellen Epstein, who bought the house in the 1970s as a three-season getaway. When she wasn't there, she shared the house with seven families of old friends, and everyone loved the place. But despite a community effort toward the upkeep and

maintenance, saving the structure was a losing battle.

Ellen decided to demolish the house; then she hired the local South Mountain Co. to design and build a new house that could be used year-round. Because of the small lot's setbacks, the house had to remain in the same footprint, so the primary challenge for the design/build firm was to keep the house small and in scale with the neighborhood, but to increase the amenities and living space. The project also marked the first time that South Mountain designer Laurel Wilkinson



4 SPACE-SAVING FEATURES FOR A SMALL FLOOR PLAN

- 1 The most useful mudroom possible.** Use built-ins to stop clutter at the entry.
- 2 Double-duty built-ins.** A bookcase stores the family favorites where a half-wall was needed anyway.
- 3 Light-filled loft.** At the top of the stairs, an open loft is another place for family members to get away.
- 4 An outside alternative.** An alfresco shower works for this family almost year-round and is a good example of how to use space.

and foreman Aaron Beck took a new-home project from start to finish.

How do you make more room in the same space?

At 625 sq. ft., the original house was euphemistically cozy, realistically too small. The new design called for at least two bedrooms, two baths, and enough storage space for each of the seven families and all their books. The big answer to the quandary was to add a second floor. This extra 400 sq. ft. allowed for a multiuse loft/family room, a half-bathroom, a quiet upstairs bedroom, several closets, and a built-in desk. In turn, the first-floor areas became more spacious with a larger bedroom; a full bath; and dining, kitchen, and living areas. Wilkinson used the footprint space that was previously occupied by a porch to make a 50-sq.-ft. mudroom at the entrance, which became Ellen's favorite room.

Of course, there was a lot more to saving space than just cutting up the floor plan. Built-in bookcases, shelves, benches, and a desk all were fitted into available space. Because the house is used primarily in the warmer months, the second shower is outside, a local tradition that doesn't require the use of floor space inside.

A tight envelope keeps down energy costs

Ellen had hoped that her new house's energy requirements could be satisfied with solar power. Unfortunately, a large oak tree stood between the house and solar gain. The tree's importance to the lot was greater than that of the photovoltaic panels. That didn't mean Ellen couldn't have an efficient house. The builders first air-sealed and insulated the frame. Triple-glazed windows from Loewen helped to keep the overall



The best room in the house. Built in place of the former enclosed porch, the mudroom's tile floor and well-ordered storage keep the rest of the house free of sand, dirt, and outerwear. Double skylights and windows brighten the 50-sq.-ft. space. Photo taken at C on floor plan.

R-value high. Blower-door tests were performed three times, yielding a final reading several times tighter than code.

On the demand side, daylighting strategies and energy-efficient appliances and lighting fixtures were used to lighten the house's load. Because the house is built to be so tight, a point-source propane heater by Jøtul in the living room is all that's needed to heat the structure. Enerjoy electric radiant panels (www.sshcinc.com) mounted in

the bedroom ceilings also were added as a backup for cold winter nights.

Blending in with the neighborhood

The house sits on a tiny road and occupies the centermost of three small lots. The exterior is sided with white-cedar shingles and trimmed in reclaimed cypress, all of which will be allowed to weather. Against that traditional backdrop, the builders added a few details that created a great

deal of charm without a lot of expense. The unusual muntin arrangement in the windows is a South Mountain trademark of sorts, and here it was offered without an extra charge by the window manufacturer. A simple trellis screens the entry, while a pergola provides a shady spot for sitting outdoors. □

Charles Bickford is a senior editor. Photos by Brian Vanden Brink, except where noted.

Informality suits this kitchen. Made of reclaimed cypress, the open shelves and cabinets make efficient, accessible storage. Larger items are stored on the continuous shelf that runs across the tops of the cabinets. Photo taken at D on floor plan.



The multifunction loft. At the top of the stairs, a bright and open room serves as a family room, study, or spare bedroom as the occasion dictates. Separated from the stairs by only a kneewall, the room feels much bigger than its dimensions would indicate. Photo taken at E on floor plan.

ENERGY-SMART DETAILS

