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## Simple, But Not Plain

Traditional in form and modest in budget, this small house provides a family of four with an impressive variety of spaces

## by Ross Chapin

Susan and Rene Theberge faced a familiar dilemma when we started discussing their new house in Amherst, Massachusetts. As soon as we got around to the subject of budget, we bumped head first into the point where many a dream home has died. If the house is to be anything more than a basic box, the sq.-ft. price can get imposing pretty fast.

As an architect who specializes in small homes, I've had many clients who simply scaled back on the sizes of their houses to get costs in line. It's a good strategy, and it's the one that Susan and Rene chose to pursue. It looked like we could fit everything the family needed into 1,750 sq. ft. But designing a smaller house presents more of a challenge to the architect. The task is to serve all

of the essential requirements of the family in a house that fits its site and includes some special touches while staying within the budget—\$125,000 in this case. At 1,750 sq. ft., that works out to about \$72 per sq. ft.

The budget eventually rose to \$87 per sq. ft. because we upgraded some finish materials and added some planters around the deck. Rising



Little gables enliven the roof. One gable roof shelters the entry while another one lets daylight into the stairwell. The diamond-shaped decoration above the window is painted MDO plywood. Photo taken at A on floor plan.



Why not have a fireplace outside? Shingle siding and a steep roof wed the house with New England tradition, but the outdoor fireplace puts a twist on the plan. This house invites outdoor entertaining. Photo taken at B on floor plan.

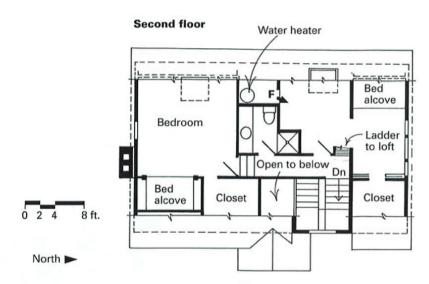
## **SPECS**

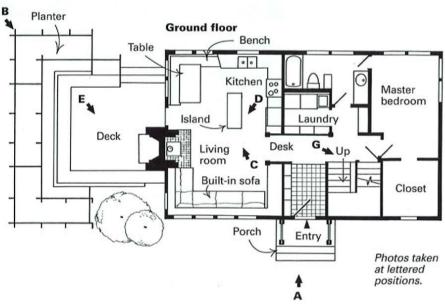
Bedrooms: 3 Bathrooms: 2

Heating system: Gas-forced air, woodstove

Size: 1,750 sq. ft. Cost: \$87 per sq. ft. Completed: 1993

Location: Amherst, Massachusetts





## A house with a fireplace deck.

The living space in this small house is doubled by the adjacent deck, which is distinguished by a dramatic outdoor fireplace. An extensive number of planters borders the deck, shielding it from the nearby road.

lumber prices added another \$4,000 to the bill. But \$87 is a pretty respectable sq.-ft. figure in a part of the country where construction costs are usually much higher. We kept costs down by identifying ingredients essential to the house and personalizing details where they matter most.

Pinpointing the priorities—For the house to work well, it was important that it meet the needs not just of the parents but of Stephen and Suzanne, the two teenagers in the family. Both Stephen and Suzanne needed spaces big enough for sleeping, homework and art projects, and also separate enough to entertain their different friends and to practice music (Stephen plays electric guitar). Given these activities, Mom and Dad needed a realm of their own, away from the kids. In addition, Susan needed an office for writing and study.

As they examined their daily patterns, the Theberges realized that they often hovered around the kitchen, dining table and nearby living room. They reasoned that if each family member were to have a private realm, the family as a whole would be comfortable with one large room for cooking, dining and living. This approach works because one primary room can be smaller than three separate rooms, and at the same time the primary room can leave the impression of a larger space.

After a good bit of discussion, I developed a detailed schematic design with plans and thumbnail sketches. We then met with Bill O'Bremski, the builder, to get his feedback. He gave us ballpark cost figures and suggested construction details and materials to control the cost. Though the budget was tight, it appeared that we were still in the game.

Common areas and private realms-I wanted the entry of the house to balance elegance and utility. The stairway dormer and covered porch break from the strong roofline and reach out to welcome visitors at the Theberge home (photo p. 40). The porch is large enough to provide shelter when the Theberges arrive home with bags of groceries, and for the lingering goodbyes that often happen.

Inside, a wall of artwork greets you. To the immediate left of the front door, shelves, cubbyholes and assorted clothes hangers provide a place to keep order among the overcoats, backpacks and snow boots.

The heart of this house is the main room (photos facing page). It is bright and comfortable, with windows on three sides. The ceiling is 10-ft. high, with exposed beams. And a woodstove with a surrounding brick hearth and mantel is centered in the exterior wall. There are places for most family activities to happen concurrently. While a couple of people might be around the kitchen island making food and conversation, another will be at the corner table. Still another person will be at the computer desk playing a game. Just out the door on the south side of the house is a deck with a brick fireplace/barbecue (photo p. 44).

While the main room is the center of the family life, the parents and the children each have their own private realms (floor plan, facing page). The teenagers have the whole second floor to themselves. They are separated from each other by the bathroom. Suzanne's room has a high cathedral ceiling with a skylight. Her bed is in an alcove, which keeps the rest of the room open for other activities.

Stephen's room, to the north, was going to be open to the attic loft, with Susan's study (and guest room) between the two children's rooms. During construction, this switched around. Stephen ended up with a suite of two smaller rooms (top photo, p. 45), and the study/guest room attic loft is a separate space reached by ladder from the hallway. An unplanned surprise is that the skylight in the attic fills the upper hallway with light.

Susan and Rene's bedroom on the first floor is minimal in size—a compromise to keep the overall size of the house within bounds. Large windows on two sides help open up the room. Another compromise was to share the bathroom with rest of the house.

Signature details—The form of this house is almost archetypal (photo p. 41). With its gabled roof and prominent chimney, it's the house a child might draw. It also shares a kinship with traditional New England houses—reefed in to resist severe winters and straightforward to build.

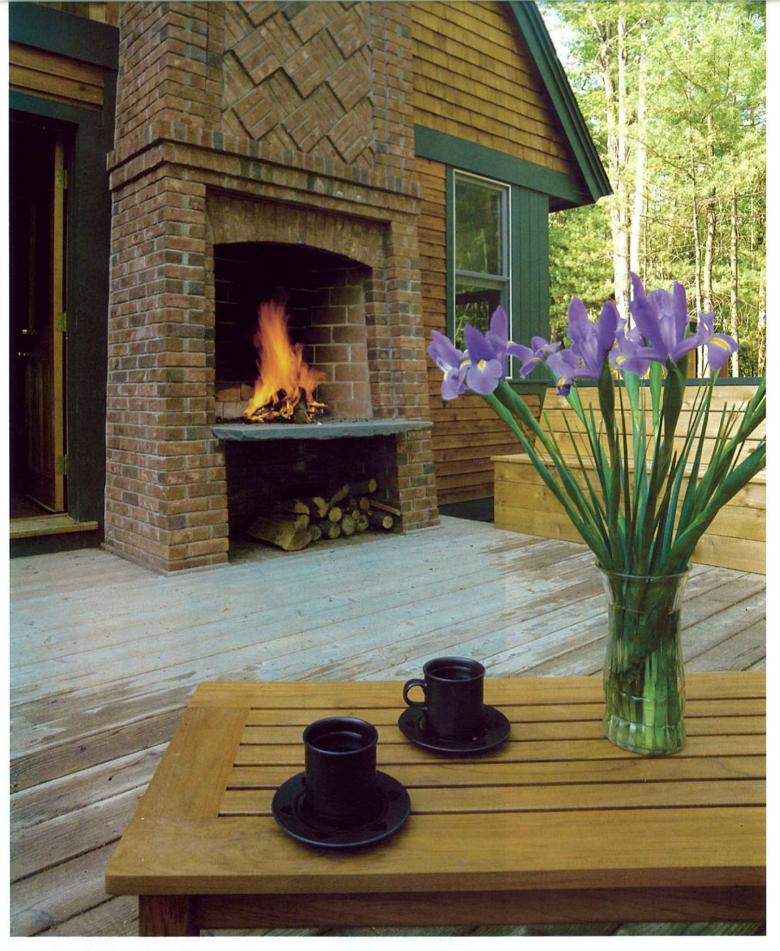
I kept the plan and the roof simple to keep construction costs down. Extraneous jogs and tricky roof planes were not even considered. The stairway dormer and the porch roof are all that break from the roof plane. All rafters spring from a common 10-ft. high plate line. The second floor is lower over the back half of the house, where the floor joists are supported on a ledger set into balloon-framed studs.

A simple building form can be brought to life by articulating its basic elements, such as windows, siding, chimney, structural beams and trim. These details don't have to cost a lot. For example, the green and white diamond ornamentation above the stairway window was made of ½-in. MDO exterior sign board. We carried the diamond theme to the accent shingles on the siding, brick ornamentation on the chimney, and to the trim at the peak of the gables. The cost of

The kitchen and living area share the same room. A 10-ft. high ceiling of criss-crossing beams and tongue-and-groove boards adds complexity to the public end of the house. The ceiling makes the room spacious, while a built-in bench (above right) and a built-in sofa (below right) take less floor space than freestanding furniture. Photos taken at C and D on floor plan.







An outdoor fireplace. The deck's center of attention is the massive brick fireplace. Held captive by a slot in the bricks, a cantilevered slab of bluestone supports the burning logs. Photo taken at E on floor plan.

the additional labor and materials to make these was minuscule.

One big element that was costly (about \$6,000) was the custom-built brick chimney and Rumford-style fireplace. This is a major focus of the house, both inside and out. The brick mass surrounding the woodstove on the inside serves to temper and even out the heat. The exterior fireplace is a wonderful place to gather.

We also spent extra money in the kitchen, where the cabinets and the island counter were custom made of cherry (top photo, p. 43). Susan and Rene wanted granite counters in the kitchen, but at \$40 per sq. ft. for granite slabs, the expense was out of the question. Fortunately, there was an alternative available: 1-ft. sq. granite tiles, which cost \$10 per sq. ft. The resulting grout lines constitute a compromise that was easy to make.

The ceiling of the main room is higher than normal—10 ft. to the bottom of the tongue-and-groove planks. It is surprising how much this extra height adds to the spaciousness of the room. The exposed 3x4 purlins bring an interplay of light and shadow above the heavy 6x10 beams, which makes them seem lighter and higher. The beam system adds a lot of character, but it was nearly omitted because of its extra cost—\$900 more than basic common joists with gypsum wallboard. And while attractive to look at, a ceiling like this transmits sound more than a conventionally joisted ceiling covered with drywall.

**Storage and built-ins**—For a smaller house to work well, there must be storage space. Besides having adequate closets, carefully placed built-ins make the most of a home's usable space. Built-ins mean the owners need less furniture, which frees living space. For example, the center support for the stair was framed with 2x12s and fitted with bookshelves (photo below).

In the main room, the back of the built-in sofa is framed with 2x10s, which creates a deep windowsill shelf (bottom photo, p. 43). At the opposite corner of the main room, the built-in bench in the eating corner takes up less space than a table with chairs. Before we drafted the plans for the bench and sofa, we made mockups in the studio to get the dimensions right for comfort.

Although it was planned from the start, the basement was one of the priorities that might have been axed if the budget tightened too far. It cost an additional \$2,500 over the cost of a crawl-space. But besides being some of the least expensive storage, shop or studio space available, a basement cannot be added easily at a later date.

Toward the end of the project, interior designer Tina Lalonde assisted Susan and Rene with the selection of finish materials and colors, and she helped them find the best prices. One of Tina's comments about the project epitomized what can go right when a family builds a home. She recalls that Susan and Rene used the design and construction process to bring the family closer together. They involved their children in the decision making, valuing their opinions.

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Teenagers need room. A sloped ceiling with a big skylight is typical of the upstairs bedrooms. Instead of a single larger space, Stephen's bedroom occupies two smaller rooms, thereby separating the music studio from the study hall. Photo taken at F on floor plan.

Staircase bookshelves make good use of space. Storage is always at a premium in a small house. A bookcase in the middle of a run of stairs takes advantage of a piece of wall that often simply can go unused. Photo taken at G on floor plan.