





LIVING ROOM INTO KITCHEN. The living room drops down three steps from the first-floor level and soars upward to the full height of the butterfly roof. Within this well-composed space, painted surfaces contrast with the wood tones of the interior, including the sitting stoop in the foreground.

Freestyle

WHEN YOU FINALLY MAKE THE DECISION TO BUILD YOUR OWN HOME,

the rush of empowerment soon gives way to the fear of bankruptcy. It may come as a shock to learn that slavishly adhering to a specific house style (colonial, Arts and Crafts, Shingle style, or even contemporary) can force your hand in ways that are inherently expensive. When style imposes nonnegotiable specs for materials and the basic shape of the building, the net result may have no benefit beyond being “correct.” Simplicity may trump style when you contemplate the cost of your home.

When budget is paramount, economics can create its own sense of style. Richard Shugar, an architect from Eugene, Oregon, fully understood the hidden costs of style. When he thought of building his own home, he and his wife Kamala were young and without children, and he was starting his own business. Like many first-time home buyers, the Shugars were looking to a future that probably included children and an income stream that would inevitably have its ups and downs, so it took no small amount of courage to build a house. Based on so many unknowns, it is remarkable that such a confident and expressive house springs out of a ½-acre lot surrounded by three streets in suburban Eugene.



●●● **TWO SHAPES, ONE PRESENCE.** On a tight suburban lot, two boxes with butterfly roofs, projecting bays, bold colors, and natural materials make an undeniable impact amid the existing mature trees. The natural location for the entry is between these two boxes (center) where the site is relatively flat. [above right]

SIDING. Board-and-batten siding wraps the entry floor of the house, while the corrugated metal bay (right) extends second-floor bedrooms. The wood-shingled second floor adds another layer to the mix. [above]



STEEP LIMITS

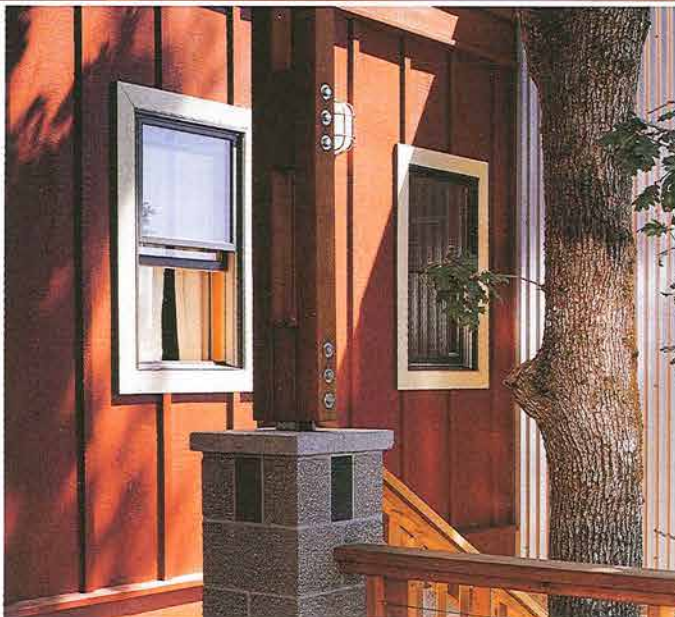
Plenty of limits faced the Shugars when they thought about building their home on this tight site. Beyond the lot size, the site also had a dramatic drop in level of almost 30 ft. over the 100 ft. of its length. But as with many small suburban sites near major cities, there was city water and sewer, so some site costs were minimized. If the design left the landscape intact, the owners could focus their money and attention on what was built versus what was put into the ground. This landscape included eleven mature trees that the owners desperately wanted to keep.

The bones of the house are simple. Its shape is formed by two basic boxes that are skewed at a slight angle to each other (allowing three of the trees to be saved) and a deck between the boxes that basks in the mountain view. These boxes burst out of the landscape as the ground falls away on the back side, making the most of the dynamic potential of the hillside site. Rather than shyly sidling down the slope, this house uses a raking roofline formed by “butterfly” roofs (see the sidebar on p. 175) to actively engage the landscape.

When you have a sloping site, you can either dig into a hillside or let the hillside run under your house. In this case, the architect did both. Where he needed to (at the garage) and where there was the least amount of slope to deal with, he used

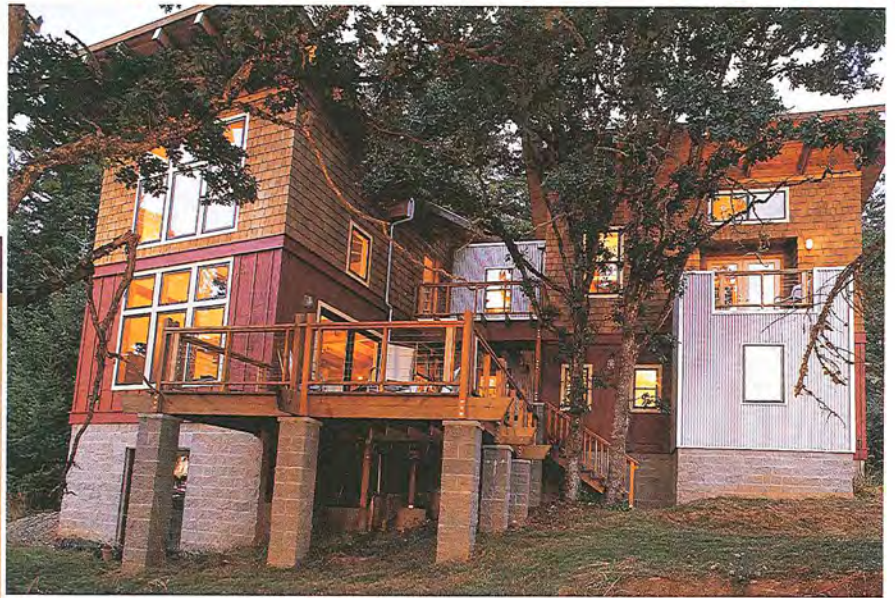


DINING INTO LIVING ROOM. Open stairs and framing and large windows create a sea of light made more dramatic by the use of bold colors and natural materials. The balcony off the central stair platform (just visible at center) is suspended by a steel rod from the lowest point of the butterfly roof above. [above]



SENSITIVE SITING. The house was oriented to respect the existing mature trees on the site. Here, with steps and house to one side and deck to the other, there's an undeniable sense of integrating the house and the landscape. [left]

Avoiding slavish devotion to a particular style gives you



●●● **LAYERED VIEWS.** With second-floor openings aligned between the two main boxes and the entry, and the height provided by the butterfly roof, the house expands visually.

compacted fill to provide space for a car to sit within the envelope of the house. Where the slope was steepest, he simply spanned over it and created a partial basement where the slope was at its lowest and required the least excavation. Crawl spaces were used everywhere else.

INSIDE UP

Inside, the upwardly angled butterfly roofs serve to expand the home's sense of space, not only in the second-floor rooms directly below the roof, but also in the double-height living room. Within this living area, a cantilevered stair landing projects into the open space, its walls painted a bold violet. Shugar created a classic open plan on the first floor, complete with a step-down lower-level living area. The central 24-ft. by 14-ft. deck expands the view upon entry to the house and allows the living space to virtually double in size during fair weather. Shugar also opened up the entire second-floor area by aligning doorways to interconnect the two boxes.

Because of the open plan, there is almost no space dedicated purely to circulation in this house, except for the staircase and the entry. An office is used as the connector on the second floor between the two boxes. A loft play space connects the two children's sleeping spaces on the second floor above the kitchen.

the flexibility to choose what fits your budget.

●●● **DOWNHILL.** Viewed from the back side, a third level is revealed—a concrete-block base set below the middling red band of painted siding. Projections and connections are also color coded, and the entire form is angled to respect the locations of the existing trees. [right, facing page]

DECK VIEW. The mature trees that were saved help frame the view from the deck, which is protected by the wings of the house and visually enhanced by the open-wire deck rails. [below]



Butterfly Roofs

A BUTTERFLY ROOF IS TRULY AN INVERSION. Rather than having the high point of the roof in the middle (a traditional gable) or at one side (a shed or saw-tooth roof), a butterfly roof turns a gable roof upside down and makes the center the low point. In this house, the architect pushes roof pitches around, making one of the “wings” longer than the other and thus higher.

This type of roof needs a low beam at the center, which usually cuts down on meaningful attic space. On the plus side, a butterfly roof offers a great opportunity to capture light at the perimeter of a building and draw it down into its center and to provide wide open opportunities for natural ventilation. It's also easy to frame.

In the Words of ●●●

homeowner **Kamala Shugar**

“From the beginning, Richard and I worked together to create a home that would be tailored to our lives, and we found ourselves reworking and rethinking various aspects of the design along the way. In the end, the house is a blend of old and new: traditional images that I prefer, like the interior window trim and molding, combined with modern materials that Richard likes. All of these aspects are modified to allow for an open floor plan that allows us to live our lives in a less formal, more farmhouse type of way.”

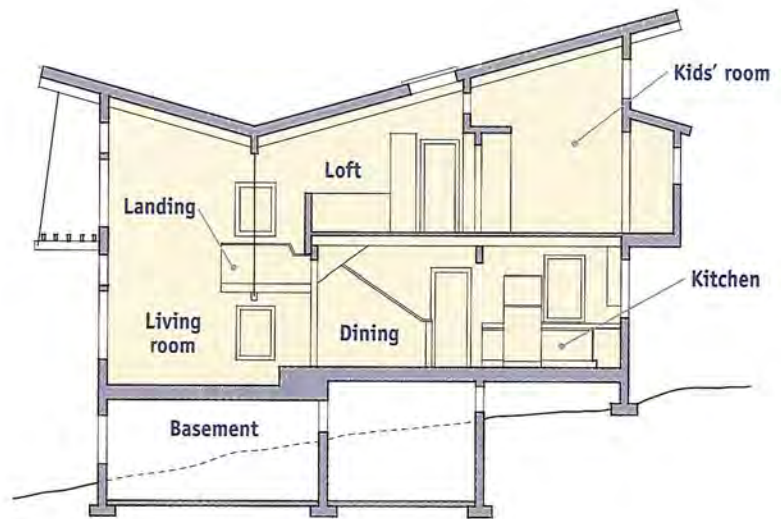
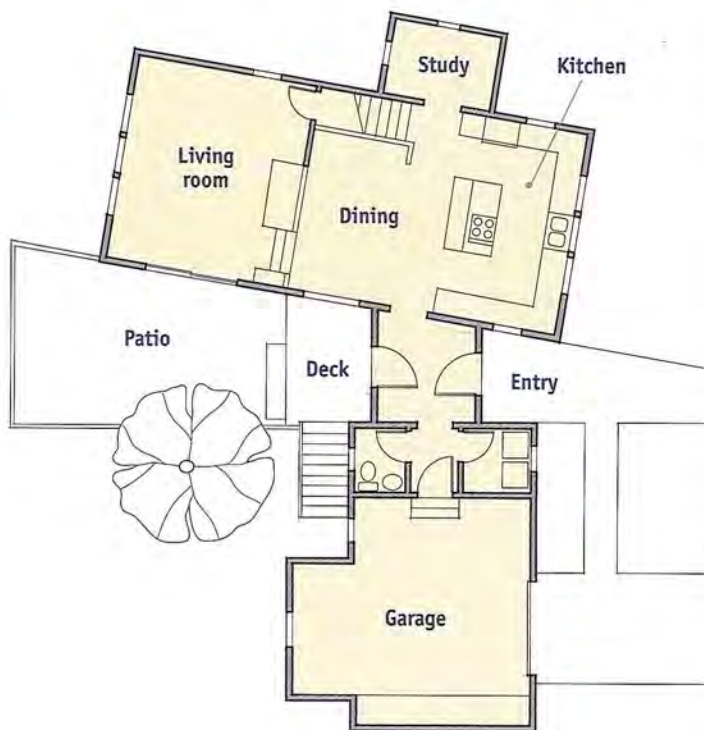
SECTION

A classic butterfly roof allows full clerestory lighting in the children's bedrooms and double-height ceiling space in the living room.

FIRST-FLOOR PLAN

The entry and the splayed-out deck form the link between the smaller garage box and the main box to the north, which is completely open with kitchen-facing street views and a sunken double-height living room looking out toward dramatic views to the west.

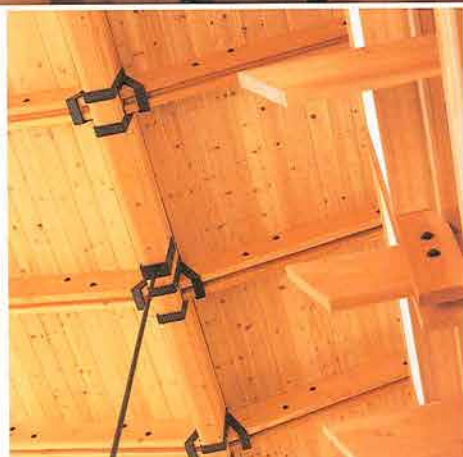
Location:	Eugene, Oregon
Year Built:	2001
Architect:	Richard J. Shugar
Finished Heated Space:	1,964 sq. ft.
Costs:	Project Budget—\$265,140
	Site Development—none
	Design Fee—\$25,000 (retail value)



To create all this openness, storage spaces are carefully packed along the outside walls, and bathrooms are sized to take up minimal space. Shugar used double pocket doors to connect the two small children's bedrooms within the 18-ft. width of the larger box and further relieved the potential sense of crowding by setting the loft space directly off these two spaces. An outdoor balcony off the loft space and master bedroom directly expands those spaces into the great outdoors.

MAKING CHOICES

This is not a house without some compromises. The garage is only one-car, the laundry room is tight, the master bath has only one sink, and the study space off the kitchen is a very snug 6 ft. by 9 ft. But Shugar compensated for these economizing gestures with some zesty detailing and spatial drama. Rather than subject this expressive house to the minimal materials of Modernism, he used wood shingles, inexpensive board-and-batten siding with plywood as the "boards," and industrial corrugated sheet-metal siding for projecting bays. In addition, 4-ft.-wide eaves, wood trellises, and those steel-clad bays provide shading and visual kick. At the front door, a rain chain directs water away from the entry. Garage doors are attractively detailed, and the undersides of all the eaves are open-framed. Inexpensive split-faced concrete block provides the base that all this activity rests upon.



KITCHEN/DINING. Set amid open framing and simple wood cabinets, the center-island kitchen is filled with light from the windows centered at the end of the space. The painted trim contrasts with clear-finished natural wood sashes, windowsills, and baseboard detailing, while laminated wood beams find their visual counterpart in the inexpensive short-pieced wood flooring that floods this space.

STRUCTURE ON SHOW. As befits a house for an architect, much of the supporting structure is put on display and uses steel strapping to interconnect exposed laminated wood beams, rafters, and joists.

MATERIAL CHOICE

Stock Material Savings



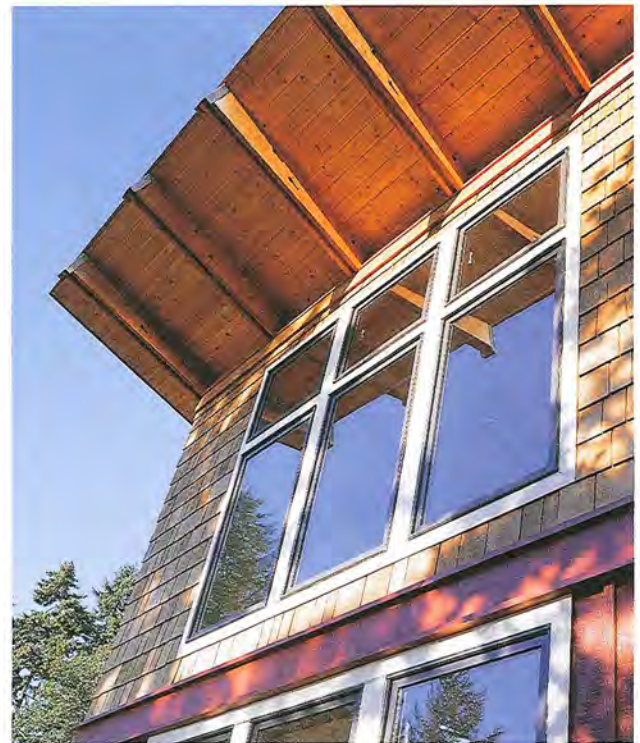
MANY OF THE HOMES FEATURED IN THIS BOOK use stock material as a way to save money, but this house offers some specifics that may prove helpful:

- The owner (an architect) wanted high-quality windows but could not afford a national line's "architect" series. Instead, he chose a line specifically oriented to builders that had far fewer size options. This ended up saving \$6,000.
- Rather than use natural wood trim on the interior, the owner substituted MDF (medium-density fiberboard) sheet stock sawn to the appropriate widths. Although slightly more susceptible to impact damage and moisture absorption, this is a much less expensive material and does not expand and contract as any natural wood product would.
- The flooring was a prefinished engineered product, which saved \$2,500 over a standard maple equivalent.
- Carpet was purchased as remnants (in this case, at \$5.00 a yard versus \$36.00 a yard.)

The interior surfaces rigorously adhere to a limited menu of materials with color used as a counterpoint to the myriad wood elements. There are also more built-ins than the modest budget of \$135 per square foot might predictably have allowed.

Unlike many late-20th-century homes, this project is an energy-conscious design. The deep roof overhangs provide shade to prevent overheating, while windows are laid out for solar gain from the south to the double-height living space. Trellises and the mature trees that were saved also help prevent overheating. The roof form and transom windows are oriented to allow natural venting. Ultimately, it is the efficiency of its compact size that enables this three-bedroom, two-and-a-half-bath house to use less energy than its less thoughtfully designed contemporaries.

If rational thought dominated every move, then couples like the Shugars would probably not build such a "risky" house at this early point in their lives. Then again, that same sense of adventure has helped launch Richard Shugar's career—the house has been celebrated in the local press and is a virtual calling card in the materials that he uses to sell his wares to potential clients. Beyond shelter, our homes reflect where our values lie. A young architect aches to express his creativity, a family yearns for a nest. For those who build their home to reflect who they are, dreams really do come true.



- **LIVING ROOM WINDOWS.** Large standard windows are combined with the open-frame structure to bring light into the double-height living room. The deep overhang overhead provides shade from the high summer sun to prevent overheating.

ENTRY. Framed by corrugated steel and a trellis of painted dimensional lumber that supports a plastic skylight, the natural-finish wood door is the centerpiece of this material medley. The chain to the left guides rainwater off the skylight's edge. [facing page]

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