



Beauty *on the* Beach



Exposed trusses of fir and steel bring openness and style to a vacation home on the Oregon coast

BY JO LANDEFELD

Timber frame with a modern touch. The steel connectors are the defining design element of the large living space and cost less than wood joinery. The rough-sawn framing serves double duty as window trim. The windows butt directly against the exposed 4x6 posts; a simple piece of 1x2 fir trim covers the joint. Photo left taken at A on floor plan. Photo above taken at B.

When the opportunity arose to design a vacation house on the Oregon coast for my family, images of the simple beach cottages we had rented years ago on Fire Island, N.Y., immediately came to mind. Those unwinterized cottages often didn't have drywall covering the framing, and I found it comforting to see what was holding up the roof. I wanted to replicate the simplicity and the outdoor focus of those beach retreats for our vacation house. Although the coastal Oregon climate dictated quite a different approach to weatherizing our house, I always assumed the structure would be entirely exposed.

Steel instead of wood

The structural system I designed consists of heavy timber beams and trusses supporting a ceiling of exposed, rough-sawn fir planking. In a compact house like ours, the spacing of supports and windows has an important impact on the rhythm of the house. Windows fill the spaces between the

exposed, rough-sawn posts in the living area and capture the views of the dunes and ocean.

Stronger in tension than wood, steel provides a sleek tension member at the bottom of the trusses in the main living area. Not only is this an interesting twist on basic wood-truss design, but it also allows the space to flow up to the peak without a heavy wood bottom chord on the truss. The steel pieces are a combination of standard eyebolts and turnbuckles welded to ½-in.-dia. and ¾-in.-dia. threaded steel rods and ¼-in.-thick steel plates.

Steel was used in a less obvious way to connect the wood members of the framing. In true timber-framing, intricate joints are made in the end of each beam, and the pieces then are slid together and pegged. Steel brackets and bolts were less time intensive, and although the brackets had to be designed and fabricated individually, the cost savings over timber joints was compelling. To design the brackets, the structural engineer determined the minimum bracket and bolt requirements; then I adjusted the shape or increased the size to improve the aesthetics.

Spending money where it counts

We wanted a simple but wonderful cottage by the sea that we could share with family and friends. The exposed structure creates that special place but is more expensive than standard framing. To offset the cost, we chose durable, economical finishes. I believe the success of the house shows that the floor plan and the shape of the rooms were more important than expensive finishes.

A weekend retreat shouldn't be high-maintenance

We built this vacation house to relax in, not to create work for ourselves. That's why we chose to use durable, low-maintenance exterior materials.

Before moving to Oregon, I designed a house on Martha's Vineyard, where I saw 100-year-old homes with their original cedar shingles. Their longevity influenced my decision to use cedar shingles for the exterior siding of our cottage. Sometimes, though, aesthetic considerations outweighed the practical. The cedar trim at the windows and fascia is stained and will need to be maintained (photo below taken at D on floor plan). But the house



needed some color to contrast the natural shingles and the no-maintenance vinyl windows. These windows are inexpensive and come with a lifetime warranty.

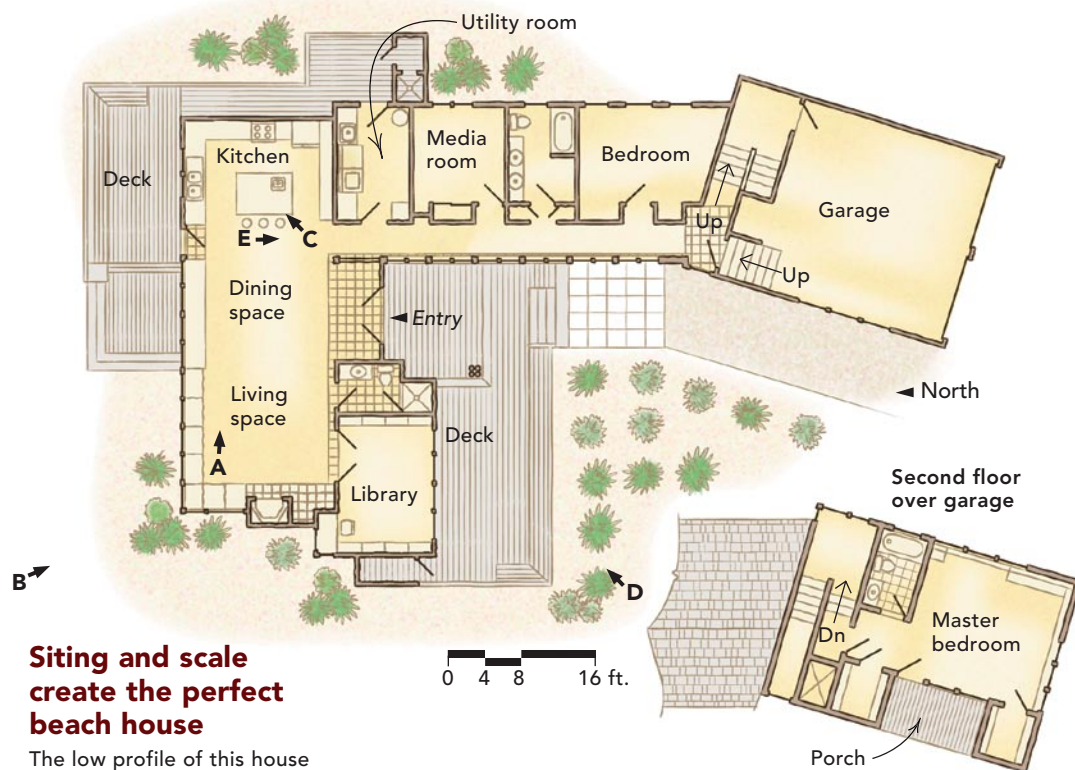
For the roof, I chose Re-Con's Fire Free Plus roofing, a composite, polymer-modified fiber-cement shingle that looks like slate and has a 50-year warranty. On the decks, Trex synthetic decking is combined with copper-tubing balusters for low maintenance.

To stand up to the corrosive salt air, all the exterior light fixtures are made of natural brass, and the exterior hardware is made of stainless steel.



Lighting for day, night, and stormy weather

The soffit running through the kitchen, dining, and living areas has fluorescent strip lights on top that create general lighting on gray days and dramatic lighting at night when they set the wood ceiling aglow. The soffit's downlights combine with pendants in the kitchen to highlight task areas. Multiple interior-lighting sources also define activity spaces within the large, open living area. Photo taken at C on floor plan.



Siting and scale create the perfect beach house

The low profile of this house lets it blend into the landscape, and because prime space is dedicated to public rooms with expanses of glass, the interior feels larger than it really is. To combat Oregon's harsh coastal environment, the house's L-shape creates a microclimate in the courtyard on the sunny south side that is protected from the prevailing winds.

SPECS

Bedrooms: 2, plus media room and library as guest rooms

Bathrooms: 3

Size: 2200 sq. ft.

Cost: N/A

Completed: 2001

Location: Neskowin, Ore.

Architect: Jo Landefeld

Builder: Blue Mountain Contractors Inc.; John Manca, Randy Wilson

Structural engineer: Stricker Engineering; Andy Stricker

We chose to have a large living space but made the bedrooms and bathrooms rather small. There are no giant Jacuzzi tubs in the bathrooms; all the plumbing fixtures are modest and occupy minimal space. The house feels big because the windows incorporate the views to open up the space and the decks expand the living area.

We will own this house forever, so we tried to design for timelessness. Rather than choose trendy colors, we worked with a color palette selected from the hues of the site. The endless shades of green and blue outside the windows are repeated inside the house.

Most of the flooring in the house is wood-colored linoleum. We used more expensive slate in the entry for its weather-resistance and in a small strip along the hallway to reinforce the L-shaped floor plan.

The kitchen's stock cabinets and plastic-laminate countertops also are economical choices. The guest-friendly open shelving not only costs less but also makes it easy to find a plate or a glass.

In the end, the combination of my love of structure and a desire for simplicity, durability, and economy helped me to create a unique house in an amazingly scenic spot where family and friends can enjoy the beauty of the natural environment. □

Jo Landefeld is a practicing architect in Portland, Ore., and spends as many weekends as possible with her family and friends at their house in Neskowin. Photos by Brian Pontolilo, except where noted.

STRUCTURAL NECESSITY BECOMES DESIGN OPPORTUNITY

The engineer required a shear wall in the entry, where the architect had hoped for a half-wall closet. The solution was steel cross-bracing of threaded rod and turnbuckles that echoes the truss's bottom chord. The steel design elements repeat through the main living areas and support the 24-in.-deep soffit and the 4x8 mantel. All the steel components are fabricated from stock parts. Photo right taken at E on floor plan.

