Grass Ceiling
Planted roofs help two cottages fit snugly into their unspoiled surroundings.

When the owners of an existing home on this stunning hillside site decided to build a couple of additional outbuildings—one to be used as a yoga studio and another as an artists' workspace—one thing was already abundantly clear: There was no point in trying to compete with the pristine landscape. Instead, the ingenious little structures simply nestled right into it.

The designs mimic the forest, with upright wood siding echoing the surrounding redwood and pine tree trunks, topped by planted roofs that evoke the forest canopy. And thanks to the site's steep slope, which mandates a verticality for the buildings, the structures' shape adds to the illusion.

Bringing the rooftop gardens to life required both structural support and attention to waterproofing and drainage, says Jonathan Feldman, the project's architect. "You have to build it so that when the soil is fully saturated with rain, the building can support that weight."

And because the project's site sits in "earthquake country," he says, structural support meant both larger columns and more shear walls.

While the soil and plants help to protect the roof against damage from the sun's rays, they also come with problems all their own, such as concerns regarding moisture and roots. To meet the challenge, a waterproof membrane was applied to the underlying roof structure. Above that, the soil is held on top of a layer of drainage fabric with a cavity underneath to allow excess water to escape. At its borders, the roof is fitted with a layer of river rock on all sides to whisk water away. — CLAIRE EASLEY