

CarbonShack Design

By Abigail Stone
Photos by Cris Nolasco

FOR STEVE PALLRAND of CarbonShack Design, sustainability and design are intimately connected. “Usually the mistake in residential design is that people create something and then they try to shoehorn a bunch of solutions into the finished space,” he explains. Pallrand builds them in right from the beginning.

Take this additional dwelling he created in the backyard of a large lot in Highland Park. While its classic lines were inspired by the Craftsman-style front home, subtle modifications to its look address 21st-century climate concerns. Raising it not only adds to the ADU’s ethereal beauty but also cuts down on the amount of concrete — a carbon-intensive material — needed for the foundation. Old-growth Douglas fir, salvaged from a dilapidated barn on the property, was mill-planed and turned into cabinetry for the kitchen and bathroom; that structure’s framing was reused to form the skeleton of the new space while a cleared tree trunk was transformed into the kitchen’s live-edge wood countertops and the dining table’s top.

Dual-pane windows, rigid foam insulation, an overhanging roof, clerestory windows, Fleetwood doors and a Rheem heat pump hot-water heater work in concert to keep the interior temperate. Solar panels provide electricity, powering the LED lighting and an induction cooktop; a low-flow toilet minimizes water usage. “How our beliefs are imbued in our lifestyle, the things we own and the places we live is important,” Pallrand stresses. “Our homes should reflect not just beautiful design, but where our values are.”



An overhanging roof, an indoor-outdoor flow and an elevated foundation are not only beautiful design choices, they also help lessen the home’s immediate and long-term carbon footprint.