



Green Compound

The five-acre Dreamtime Farm includes a separate large workshop. Clerestory windows (below) allow natural ventilation and daylighting. A dining area (right) in the great room opens to patio and xeriscaped gardens. Many exterior walls are 24-inch-thick rice straw bale.



Subtle Masterpiece



This home's smart, low-tech approach to efficiency took home the gold.

SIMPLICITY WON OVER the judges to make Dreamtime Farm, Santa Ynez, Calif., this year's Grand Overall Green Home of the Year Award Winner. Architect and judge Hank Krzysik called the home "simple, clean, energy-efficient." Builder and judge Michael Ginsburg said the home was "simple, straightforward and understandable." Judge and energy expert Robert Bulechek lauded its features: "net-zero, graywater with solar hydronic."

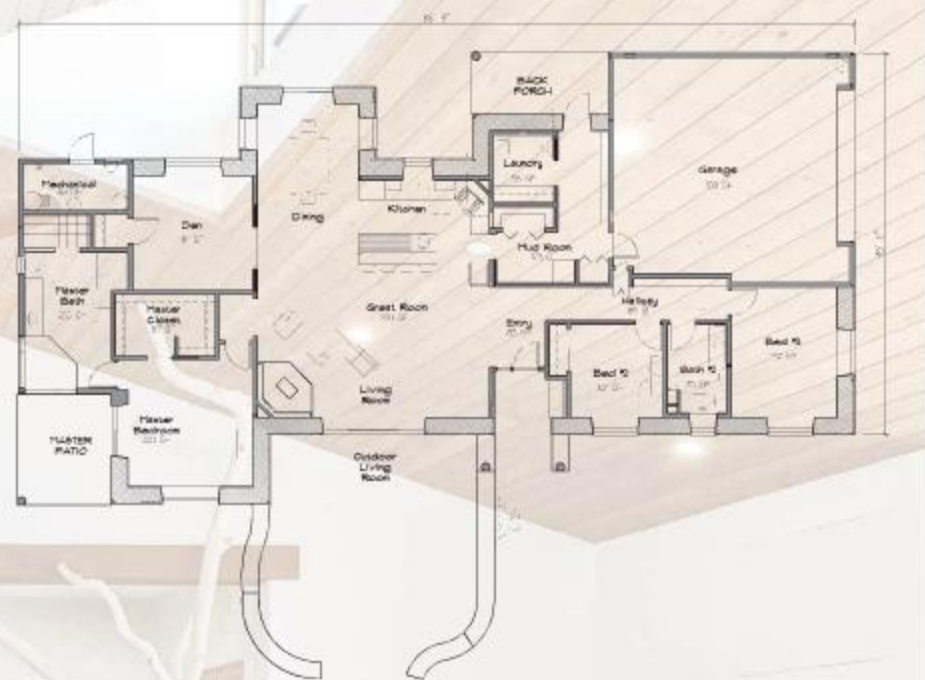
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Certified Lumber

Pine-plank ceiling is FSC lumber with Chain of Custody Certification.

Local Sourcing

Custom cabinets are made from locally harvested sycamore.



Efficient Appliances

The KitchenAid Superba dishwasher features ProScrub technology, flexible racking and is whisper quiet.

Recycled Tile

The kitchen backsplash features recycled glass tiles.

Thermal Floor

Massive, stained-concrete flooring provides thermal heating and cooling storage.

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Paul Poirier + Associates designed the 2,500-square-foot net-zero home. That figure includes all livable space. When the thick walls are included, the home's footprint is 3,100 square feet. "Straw-bale is key to the thick-walled comfortable feel, but is used sparingly," says Santa Barbara, Calif., architect Paul Poirier. Many, but not all of the walls, are 24-inch-thick rice-straw bales.

"Rice straw has a high silica content, which makes it resistant to rot and termites," says builder Paul Rose of Semmes & Co. Builders. His company uses a high-lime content plaster to seal the straw-bale walls, because the plaster "breathes," allowing moisture to escape from inside of the walls—and keeping water from seeping through on the outside. "Also, seismic studies have proven that straw-bale construction performs very well in earthquakes," Rose notes.

Passive solar design with deep overhanging eaves helps the Santa Ynez home stay cool during summers that often exceed 90 degrees. In the winter, when the sun is low, large, south-facing windows capture sunlight, which is stored in the colored concrete floors. Operable clerestory windows open the home for ventilation on temperate days and nights. If it does get really cold, a solar hydronic radiant-floor heating system kicks in. The solar hot water system powers the hydronic in-floor heating, backed up by a high-efficiency boiler. Semmes & Co. Builders, founded in 1978 by Turko Semmes, has always focused on building passive solar homes.

The home has many sustainable features, including use of locally harvested sycamore and eucalyptus. Kitchen cabinets and shelves are sycamore. Some lumber is salvaged: notice the tree used in the open living space and the posts on the workshop. The rest of the lumber is FSC lumber with Chain of Custody Certification. Finishes are low-VOC. Cabinetry is formaldehyde-free. The great room's woodstove is EPA Burn Wise certified.

Smart home lighting controls operate the home's LED lighting. The 891-square-foot great room includes a kitchen and formal dining nook. Caesarstone, made from quartz composite, surfaces the counters and island. The space opens to an equally large, low-walled outdoor living room—"providing the optimal indoor/outdoor living space with an expansive view of the valley and mountains," Poirier says. The wall undulates around the patio, and continues to the home's entry—providing separation between entry and living space, while maintaining an open feel at the main entry door.

The open public rooms are the living hub of the split plan. The owners' suite, on the home's west side is its own enclave with a separate patio. There is also a 191-square-foot den. The home's east side includes the attached garage that leads to the laundry and mud room and another porch. Separated from these utilitarian spaces by a long hallway are two more bedrooms—and the second bathroom.

Located on five acres in a high fire-area, the home is capped by a 24-gauge standing-seam metal roof, and has a home sprinkler

Roof Work

Solar hot water collection happens on the main roof of the south-facing home. The 1,850-square-foot workshop houses the 9kW PV system. Both roofs are long-lasting 24-gauge standing seam metal.

system. Vegetation on the five-acre site is well away from the home and workshop; experts recommend 100-foot defensible space around the structures.

The 1,850-square-foot workshop is a pre-fabricated steel shell combined with a site-built patio structure to keep costs low while maintaining the overall custom architectural appearance. The workshop houses the 9kW PV system on its roof. The grid-tied system generates more power than they use. The project also exceeds the California Title 24 energy requirements by 85.5 percent.

Like many straw-bale homes, a truth wall (a framed and glassed over area shown at far right) showcases the rice-straw interior structure. **GB**

Project Stats

NAME: Dreamtime Farm—Santa Ynez, CA
BUILDER: Paul Rose, Semmes & Co. Builders
WEB: www.semmesco.com
ARCHITECT: Paul Poirier + Associates Architects
WEB: www.poirierandassociates.com
PHOTOS: David Palermo

