

Award-Winning Coverage of Sustainable Construction, Products and Lifestyles

GREEN BUILDER[®]

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ENERGY SOLUTIONS

Imagine a future of renewable power and intelligently designed living. In this, our annual awards issue, we honor the nation's very best green homes and explore the innovative edge of housing.





Resilient Ranch

Water, food security and land stewardship are just as important as energy independence for this Texas ranch house.



FAMILY AND COMMUNITY are the focus of this ranch, creating a space where the homeowners could age in place surrounded by family, food and the Texas countryside. Nestled on 100 acres in Texas Hill Country, this artist's compound is a colorful gem of self-sufficient living and connection with nature.

In the past few years, Texas has been plagued with drought and wildfire; the homeowners built this passive solar home in response to the changing landscape. A preliminary Wildfire Defense assessment was incorporated into the building site to minimize risk of loss.

An abundant one-acre garden and orchard are watered solely by a 30,000 gallon rainwater collection tank, which is also used to water Longhorn cattle and other livestock. An additional 40,000

PROJECT STATS

NAME: Rainwater Ranch, Burnet, TX

BUILDER: Native www.buildnative.com

ARCHITECT/DESIGNER: Stephen Colley, Stephen Colley Architecture www.stephencolley.com

INTERIOR DESIGNER: Jacqueline Burke, Jacqueline Burke and Associates

PHOTOS: Twist Tours Photography, Allison Cartwright

From the Judges

“This project goes above and beyond energy efficiency and includes components of self-sufficiency: solar PV with battery backup and rainwater collection for domestic and livestock uses, as well as an area for planting and cultivating food.”

tank provides 100 percent of the family's domestic water. This solar-powered compound is complete with a battery backup system to support the energy needs for both the main house and detached living quarters.

The building envelope integrates 2 x 6 advanced framing, full fill spray foam insulation and *ZIP System* into an exceptionally energy efficient yet affordable home. Whole-home air filtration and a high-efficiency Carrier *Infinity* variable-speed heat pump provide a comfortable and healthy home environment. No-VOC paints and stains were used throughout.

Large overhangs and screened porches reduce exposure to the intense Texas heat and provide the family with additional living space. Handcrafted handrails, made by local blacksmiths, incorporate local materials.

This home has currently achieved a 10 HERS rating. The homeowners are already planning an expansion of the 8.7-kW solar array, with the ultimate goal of net-zero energy.



Family Plan. The generous ranch house includes a master bedroom, three bedrooms, great room and an art studio.



Firewise Façades. Featuring a durable stucco exterior and a Galvalume reflective metal roof, this Texas home is built and designed to local standards for wildfire resistance.

SEE THE FLOOR PLAN

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Hands on the Land. Taking special consideration to land stewardship and property management, the homeowners removed invasive species and planted natives themselves.