

For This Energy-Efficient Home, It's All in the Family

Alex Finnell's parents joke that the design phase for their new home began the day he was born. So when the elder Finnells decided to build a house in Austin, the logical choice for the project designer was their son and his fledgling firm, Finn Design Build.

Bouldin Creek Ranch, completed last September, encompasses 2,900 square feet of conditioned space with a 600-square-foot, semi-detached garage and modestly landscaped grounds that make the most of the large inner-city lot. The flatness of the 14,000-square-foot tract also allowed the young designer to skillfully organize all programmatic elements on one level. Maintaining a zero-step threshold was essential because his mother, Susanna Finnell, faces mobility issues that may require her to use a wheelchair in the future. In addition, Alex's nonagenarian grandmother, Carol Finnell, occupies one wing of the house.

The two older generations wish to live out the rest of their years in the comfort and accessibility provided by Finnell's design. Far from appearing clinical, the house features subtle details—such as a sandblasted-aluminum handrail surround that doubles as a towel bar in the master bath's roll-in shower—that elegantly respond to the realities of aging in place.

"While no one wants to imagine living one day compromised by any handicap, circumstances forced us into this outlook," Susanna says. "Living with a 95-year-old parent lets you see up close what old age actually looks like. It makes it easier to imagine how we can mitigate some inconveniences in a thoughtful manner without compromising design."

Equally important to Finnell's parents-turned-clients was maximum energy efficiency, which the house accommodates through the use of five geothermal wells (these qualified for a 30 percent tax credit and their waste heat is used to condition domestic hot water), a rooftop 10-kilowatt photovoltaic array that uses micro inverters, and LED fixtures for 90 percent of the building's indoor lighting. The Finnells also selected an energy monitoring system that provides real-time data on electricity consumption. The goal is to eventually reach net-zero energy; the project, which incorporates numerous other sustainable-design strategies, received a LEED Platinum rating and a five star rating through the Austin Energy Green Building program.

Natural light fills almost all of the interior spaces, particularly the public areas where abundant glazing offers views to both the semi-private front courtyard and the secluded backyard walk-in saltwater pool. Along the southern exposure, deep overhanging soffits shade the inhabitants from the intense Texas sun and also help to protect the Finnell's expansive art collection displayed on the walls.

"The design matches how we try to live our lives," Susanna says. "Responsible to the environment to the best of our abilities, uncomplicated, but with a defined sense of how style and quality can affect the lived experience on a daily basis—from the moment of waking up and experiencing the light that a particular morning offers to a large crowd at the house experiencing light, flow, sound, and comfort in stripped-down simplicity."

His family's relaxed relationship continues, Finnell says, which affords periodic occasion for minor post-occupancy modifications.

“Obviously, having such a familiarity with their lifestyle and needs during the initial design was invaluable in developing a house that functioned for them on many levels,” Alex says, “but even more interesting for me has been post design and construction. While we had initially embraced the project as an opportunity to test out advanced green and sustainable solutions in an accessible ‘age in place’ home, the exciting part of this experience is the ongoing testing and tweaking that we are able to do together since we have such a close relationship. Oftentimes, family dinners these days involve a little side trip into the mechanical room or out to the pump timer switch to make an adjustment.”

Green Team

Designer, builder, construction manager, general contractor: Finn Design Build, Alex Finnell

finndesignbuild.com

Interior designer: Anne Breux, Anne Breux Design Studio, Anne Breux

Client, owner: Richard and Susanna Finnell

LEED rater: Contact Consultants & Architects, Elton Chessman contactcs.com

Austin Energy rater: AEGBP, Bryan Bomer

Landscape architect: D-Crain Landscape Design & Construction, Dylan Robertson & Heather Link Curry d-crain.com

Materials

Adhesives, coatings, and sealants: ML Campbell

Alternative energy systems: Lumos

Appliances: Meile

Bath fixtures: Hansgrohe

Countertops: Silestone; Caesarstone

Exterior lighting: Volt

Interior lighting: Nora

HVAC: Bosch

Kitchen fixtures: Delta; Blanco

Paints and finishes: Sherwin-Williams

Siding: Galvalume

Toilets: Toto

Water heating: Bosch

Windows and doors: Gerkin; Arcadia

The original version of this article misspelled Carol Finnell's name and implied that Alex Finnell is a licensed architect. He is a designer. We regret the errors.