



Unlike the glamorous outdoor kitchens of many Metroplex residences, the backyard barbecue and seating of this historic-looking green built home presents a blast from the past. With its tin roof and Texas farmhouse style, the house fits right in with the small-town surroundings of historic Lewisville, although it is actually a modernistic structure built with James Hardie fibercement products and the latest in energy-efficient homebuilding techniques.

BY ELAINE ROGERS • PHOTOGRAPHY BY TERRI GLANGER

BEYOND APPEARANCES

GREEN DESIGN GETS A HISTORIC STYLE

19



Some great ideas hit like a ton of bricks, but others are of the slow-burning variety. They park in the back of the brain and simmer for a while, building momentum slowly as additional bits of information reveal themselves and carefully piece together a plan.

Left: Sharon Ellis relaxes on the sun porch of her "forever home," newly constructed in an architectural style referred to as National Folk Design. At her feet is gentle giant and constant companion, Olie, a rescued St. Bernard.

That was the case when longtime Lewisville residents Kent and Sharon Ellis took on the task of building a "forever home." Over the course of 32 years, they had lived in two different homes in the community, and last year, began construction on a new structure in the historic Old Town Design District, a stone's throw from downtown Lewisville's community square. Although styled like an old Texas farmhouse, it was a surprisingly modern project given a design that utilized a range of green building construction techniques. Now complete, the traditional-looking home is a monument to high insulation values and futuristic energy efficiency.

"We just started researching things and realized we really wanted it to be green built," Sharon recalls. "We feel like this is the way to go for the environment, so we were surprised once we got started, how hard it was to find builders who were even informed about green building or who knew how to do this sort of thing."

GREEN DESIGN



Below: In the hallway bath, homeowners stayed with the farmhouse motif with components like an antique table topped with a painted metal washbasin, bead board and an ornamental hall tree.

Above: Decorative components in the kitchen include white cabinetry, warm-toned Formica countertops, a farmhouse-styled white apron sink and heirloom quality furnishings. Windows in the kitchen and living room remain uncovered to afford unobstructed views of the double lot and, beyond that, neighboring homes and buildings of the historic area.



Fortunately, she says, they found Lewisville architect William Peck, a sustainable architect with an emphasis on green building and multigenerational housing, who led them through the process of creating a more environmentally friendly design. After working with Peck for 8-9 months, the couple eventually connected with Chris Miles, a local contractor and builder known to listeners of KSKY 660AM as co-host of a Saturday afternoon show called House Talk. Also a fan of green building techniques, Miles had worked as project manager on North Texas' first zero energy home, a structure that won accolades in the fall of 2004 during that year's Dallas Parade of Homes while promoting the U.S. Department of Energy's Building America program and its "systems thinking" concepts of energy savings and environmental building practices. With Miles' involvement and Peck's ongoing efforts, the Ellises forever home finally took shape.

Beneath the simpler style of an architectural style referred to as National Folk Design, this historic-looking home is designed around such materials as Icynene foam insulation and James Hardie fiber cement siding and building materials—routing an impressively complex synergistic combination of elements such as passive ventilation, a silver metal roof with reflective qualities, ultra insulated windows and door products, an HVAC Energy Recovery System and a tankless water heater.

"It doesn't look like it, but this is a total Hardie house," Sharon explains. "Even the columns outside are Hardie. ... They describe a house like this as being like an envelope because it is built differently than traditional homes, with as few holes in the envelope as possible so that it stays airtight and energy efficient."

Because the home's construction is so "tight," Peck and Miles note that it also requires a heating ventilation and air conditioning system that routinely exchanges stale indoor air with fresh outdoor air. "A house like this is a system," Miles explains. "Everything works in conjunction with everything else." For instance, Peck designed the home to hug a tree line on the west for shade and with a north-south orientation in order to take advantage of Texas' prevailing southern breezes and promote passive ventilation. Supporting this concept was the selection of well-constructed vinyl windows with low-E glass and solid frames that could stand up to the heavy usage of such breezy purposes.

"With all these windows and the porch facing out to the yard, it feels so



This Page (top photo): Viewed from the adjoining kitchen, the living room is centered by a built-in vent-free gas fireplace and a tumbled marble surround that sets the tone for much of the home's décor. Although designed in the mode of a comfortable, older residence, the newly constructed home is an impressive monument to the merits of green building with energy costs at least 60 percent lower than those of a comparable traditionally built home.

Above: The simply styled but well-equipped kitchen connects with the living room and has a rustic feel with seeded glass cabinet fronts and a vent pipe curved to create the look of an old-fashioned stovepipe. The wood bar is designed by friend and artisan Chris Grimes of Mission Tech Studios, and the quaint pantry door nearby hides a roomy storage area that cleverly utilizes space under the staircase.

GREEN DESIGN



Above: In an upstairs guest bedroom, quilted bedspreads, heirloom quality furniture and sentimental effects like an old suitcase used by the couple's grown kids in childhood are well-suited to the home's farmhouse style.

Below: The shady sun porch in back of the house offers charming views of the countrified lot in Lewisville's Old Town Design District. Beyond such aesthetic appeal, the space is designed to catch southern breezes and maximize shade, i.e., facilitating passive ventilation and reducing solar heat gain.



open," Miles adds. "But, what you don't see is that those windows are so well-insulated that when you close them, you can't hear anything from outside. It's amazing. It's like your miles away from anything instead of a block from downtown."

Additionally, whereas creaking floorboards and the sound of footsteps is commonplace in older farmhouses and even newer traditionally built two-story homes, Miles says sound-proofing strategies in this home make that a thing of the past. "People could jump up and down up there, and you wouldn't hear a thing downstairs," he says.

A peek in the attic, conveniently accessible from the second level, provides an interesting view of the home's greener underpinnings. Coating and contouring the walls and the underside of the roof, the Icynene looks suited to an eerie space-age movie set as it blocks even the smallest possible source of heat loss or humidity gain. Unlike the stuffiness of traditional attics, the area stays as cool as the rest of the house, and the silvery duct work plus a highly-efficient tankless water heater further the futuristic look.

Curiously enough, Sharon says their journey down the progressive path of green building actually started with an attraction to the past. "Kent always jokes that he was born in the wrong era and that he should have been a cowboy," she says with a laugh. It was his appreciation of old farmhouses and their tin roofs, in fact, that led them to investigate some of the newer building practices and insulation materials that were being used on such structures.

And while Sharon and Kent are proud to have made a personal choice that supports the larger planet-friendly goal of reducing America's dependence on the burning of fossil fuels while also offering others a tangible example of how do-able green building is, they're equally pleased about doing it within the context of a charming, comfortable abode that conforms so well to their historic location.

Having collected antiques for over 30 years, Sharon says many of the rooms were actually designed with the precise placement of some of their favorite pieces in mind. For example, in the office at the front of the home, the built-in cabinetry was made specifically to match a 200-year-old barrel desk the couple bought years ago in Kansas City. And in the breakfast area, a side window ledge sits higher than a nearby back window in order to rest atop a favorite antique console. "The workmen thought that was a mistake and tried to change the height to match the other windows," Sharon recalls. "But we had to tell them, 'No, that's how we meant it to be. Don't change a thing.'"

A white picket fence out front sets a quaint tone and the extra wide entry welcomes visitors with dark Chesapeake wood flooring from Mannington. It is just one of many signs of the couple's emphasis on Universal Design, as many aspects of the bathroom layouts and kitchen amenities are subtly styled on the concept of aging in place. "All our doors are extra wide and the halls are extra wide too," Sharon explains. "Bill was very careful to plan this whole house to accommodate us as we get older so we can get around no matter what type of mobility problems we might have. The good Lord willing, we can stay here."

Regarding décor, Sharon put a lot of energy into making decorative choices that would coordinate with the home's old-fashioned feel. Black and white tiles in their exercise room were selected "to be more authentic to the period" and in the hallway bath, bead board and a decorative hall tree accent the rustic look of the antique table and painted washbasin.

Country charm abounds in the kitchen with decorative components like seedy glass on the cabinets, a glass inset pantry door, a plain white apron sink and a vent pipe styled like an old stovepipe. Achieving such quaint looks had its challenges, Sharon confesses, as the sink was easier to find in metal finishes and other designer colors rather than the white, and workmen weren't sure what to make of her affinity for the old-fashioned stovepipe given the increased popularity of dramatic range hoods in new home construction and remodeled kitchen spaces. "I just had to insist that that was what I wanted," she says.

For the countertop, she and Kent chose a warm-hued Formica and had the bar designed in wood by friend and artisan Chris Grimes of Mission Tech Studios. Completing the look is an heirloom quality draw-leaf table topped by an antique chandelier with hard-to-find glass globes. Windows and doors at the back of the kitchen and living room remain uncovered to afford unobstructed views of the double lot and, beyond that, the neighboring homes and buildings of their historical area. In the adjoining living room, comfortable furnishings share space with a game table set for frequent rounds of dominoes. Centering the room, the attractive vent-free gas fireplace touts a golden-toned tumbled marble that, besides being just the color Sharon had searched for, was almost the last building material she found. "I had based the whole house on that color, but then the tile I'd selected wasn't going to come in on time, so I had to start over. ...I got lucky because the tumbled marble was less expensive than the other, and it had just the right texture and color."

Antique furnishings and quilted bedspreads stay consistent with the home's farmhouse style in the guest rooms upstairs, while the couple's master bedroom downstairs touts a complimentary and comfortable denim blue décor. Windows from the private quarters open up to the breezy porch and yard views, and the master bathroom touts a rustic simplicity and a wide layout styled with an eye toward accessibility and years of use.

"The Universal Design element gives us peace of mind, but also has the benefit of being something that's good for resale value," Sharon explains. "We talked about all this with our kids when we started this project, because this is their inheritance. It seemed smarter to do this than to just buy IRAs."

Energy savings are roughly equivalent to those of a home about one-third its size, which means that in comparison to Energy Star homes that typically consume an estimated 15 percent less energy than traditionally built homes, this residence touts utility bill reductions beyond the 60 percent mark. (Miles notes that the Ellis home earned an impressive 92.3 score on a Department of Energy's Home Energy Rating System (HERS).)

In terms of upfront costs, rough estimates are that making greener choices in new home construction may cost the average consumer about 15 percent more initially, but Peck and Miles point out that those figures are frequently offset by the benefits of factors such as only having to install one air conditioner instead of two in a well-insulated two-level home. And given the guaranteed pay-off over the years with the dramatically reduced energy usage, both the homeowners and the professionals involved with the project say they simply don't see a downside to building homes this way.

Although green building is a notable trend in other parts of the country, Miles says it remains a largely unexplored and novel approach in the DFW Metroplex. Because of that, Peck notes that it is doubly impressive when average homeowners like the Ellises take it upon themselves to research the topic and initiate such an ambitious plan. In this particular case, it also appears that one "great idea" may have hatched yet another, as Miles and Beck say they are cooking up a new plan to partner together on future green building projects. In some ways, the private home in these pictures may have become a model home for more sustainable housing and a sure-to-grow regional green building industry.



Above: Just off the entry, a home office features built-in cabinetry made specifically to match a 200-year-old barrel desk bought years ago in Kansas City.

Below: The old-fashioned mood of the master bathroom masks several progressive "aging in place" design concepts like extra width and counter insets to accommodate mobility issues and wheelchair accessibility.

