Crispin and Clementina Eley's dream home isn't about lavish furnishings, a mansion perched on a mountaintop or a sunswept view of the Newport Coast. It's a plastered concrete formwork abode rising like Legos on 1.4 acres at 416 W. Las Palmas Drive. Environmentalists couldn't be more impressed. The Perform Wall Panel System, composed of cement and polystyrene recycled from Sony products, is filled with rebar and cement and resists black mold, mildew, termites, earthquakes, fire and wind. In addition, the trademark-insulated concrete formwork provides thermal insulation reducing the needs for air-conditioning and heating. And a plumbing system that allows gray water to be recycled for irrigation complies with the new state code. "People are asking me all the time why we're building this, " said Clementina, standing on the spread that once housed a Bastanchury Ranch house. "I just tell them somebody had to be first." The Eleys are the first on the block, the first in Fullerton and according to architect, Richard Hofmeister, the first in Orange County to use the Perform Wall building materials. "The pre-cast forms are popular in Arizona and in New Mexico," said Hofmeister, who holds a master's degree from the Frank Lloyd Wright School of Architecture. "We've combined passive design for warmth and cross ventilation and active design that captures solar electric and solar thermal heat." Indeed, the distributor, Chuck Schneider of Earth Friendly Building Materials of Mira Loma, lives in a Perform Wall home in Palm Springs. Although the forms are much larger than John Norman Jr.'s concrete block residence at 738 W. Valley View Ave. in Fullerton, the benefits are similar. Norman said his home was built by "a Mr. Hood" in the early '50s with reinforced cinder block and a cast concrete roof that has lasted 53 years. "We've never had airconditioning, just a constant temperature, "Norman said. "We heard Mr. Hood was elderly and wanted low maintenance. The only problems we've had have been a few cracks in the wall, having to hang pictures with a power drill and the blocks taking a lot of paint." After moving to Fullerton in 1987 and living six houses from their new Las Palmas property, the Eleys realized the acreage would be perfect for a dream home. "We just had a feel for the property with its mature trees, bridle trail to the lake and cross breeze, " Crispin said. Originally part of the Bastanchury Ranch, the last house on the site was termiteinfested and unsalvageable, according to Hofmeister. Harold Ensign, whose grandfather Orville Ensign designed the nationally recognized Ensign Carburetor, recalled his aunt Muriel and Uncle Roy moved onto the 416 W. Las Palmas Drive property in the mid 1950s. Fullerton Public Library Curator Cathy Thomas said the site might originally have had outbuildings amid large trees. When first considering a functional design, Crispin was drawn to his childhood brick home in London that had three stories. Clementina knew she wanted to incorporate elements from her roots in Mexico City. The couple, who met counseling children at a camp in Switzerland, agreed on an indoor/outdoor environment with a nearly 5,000-square-foot home surrounding a 1,500-square-foot courtyard. "We wanted every room to have a cross breeze," Clementina said. "In fact, we designed the boys' bedrooms with lofts that open onto a balcony so they could launch their toy airplanes and catch the wind." Additional amenities include clad aluminum windows, French doors with dual glazing, a metal shingle roof that offers ventilation from the underside and mesquite wood flooring with radiant heat. Hofmeister

also designed a pool pavilion for the Eley children: Marlena and Dante, who attend Laguna Road Elementary School, and Pascual, a student at Parks Junior High. The plumbing system incorporates two sets of pipes. One holds black sewage, kitchen sink and toilet water, while the second set collects gray water from all other sinks, the shower and washing machine. "California is one of the first states to implement a gray-water code that allows the recycling of water for underground irrigation," Hofmeister explained. "Even if gray water is not allowed in some codes, a house can be plumbed for it and looped back to the main sewer for future. "This building system will be marginally more expensive than a conventional frame home," said Hofmeister, adding the Eleys didn't wish to disclose the building costs. "But look at all the additional long-term ecological benefits of reduced energy consumption and environmental quality."

"The City of Fullerton has been great with building codes and environmental reviews," Hofmeister added. David Neilson, a general contractor who lives on East Las Palmas Drive, said when he was brought into the project, he didn't know anything about the Perform Wall system. "I'm really excited to learn all about this product," said Neilson, stopping by to check on progress. "I built the Southwesternstyle home down the street and created a log image." Rolling up his blueprints, Hofmeister concluded: "The time has come to be mainstream (with environmentally friendly housing). Crispin and Clementina are pioneers of a direction I see in green home design."