## SECTION E

# The San Diego Union-Tribune



#### JEFF GRACIK PHOTOS

# sustainably modern

## 9 YEARS OF PLANNING TRANSFORMS AGING BUNGALOW INTO BREEZY, OPEN, GREEN, CONTEMPORARY DREAM HOME

#### **BY CARON GOLDEN**

ack in 2008, architect Keoni Rosa and his husband, John Clark, found their house the one that would be a keeper for the couple and their son Kaleo. What they were looking for was something they could build onto, remodel and make their own. What they found was a 1,500-square-foot bungalow in South Park that dated back to 1942.

The house itself wasn't the attraction — the plumbing was shot, the electricity poorly designed, and despite the square footage, it felt tiny and had only one bathroom. In short, it had reached the end of its lifespan. But it sat squarely in the middle of two lots totaling 25,000 square feet overlooking Juniper Canyon.



The street view of the Rosa-Clark home in South Park.

ral light and no character. Throughout that interval, the

"We saw the space, options and possibilities," Rosa said. "It was perfect."

That blind love would have to endure for nine years until the couple was ready to renovate the property. During that time, they also had to put up with a leaky roof that required 20 buckets placed around the living room to catch rainwater during storms; with tiny rooms and an equally tiny kitchen that didn't function well, a true inconvenience when their extended family visited; and with little natu-



West balcony with modernist play structures in the background.

couple took advantage of the time until they could afford to rebuild by identifying their needs and desires for the property. Having the benefit of Rosa's design and construction expertise, especially with clients for whom he had created green sustainable homes, the form and function the men envisioned were able to take shape in reality.

"I had almost nine years to sketch and draw and dream and talk about it," he said.

Rosa designed the house and selected every finish and green component. When it came to sustainability, everything was a pri-SEE **GREEN • E5** 

### **Ninth Annual Green Homes Tour**

When: Sunday, Oct. 21, 10 a.m. to 4 p.m. What: Ten eco-friendly projects around San Diego County will be featured on the self-guided tour. Cost: General public tickets are \$15 and can be purchased online at usgbc-sd.org/event-3042748. For tour map and information: www.sdgreenhomestour.org or call (858) 761-1707.

# GREEN

ority. "The addition expanded the house in every direction," he said, "creating a new modernist style." The design earned the house a spot in the upcoming San Diego Green Homes Tour on Oct. 21.

Visitors to the new 3.075square-foot, three-bedroom/ four-bathroom Rosa-Clark home are welcomed into a modern east/west-sited structure faced with distinctive lava tile, stucco and black steel surrounding a 9-foot-high glass front door. On the street level is the main living space. Downstairs, level with the backyard, is a shared office for Rosa and Clark that earlier functioned as the original house's basement as well as what they call "teen center," a family room filled with their old comfy leather furniture and lots of Legos, where 11year-old Kaleo and his friends can hang out.

Back on the main floor. past the entry hall where the family's two terrier mixes, Coco and Foxy, watch street life go by, is where the wow factor hits. An airv combination great room/kitchen with 10-foot-high ceilings and 24-inch square concrete-style porcelain floor tiles — laid in a grid to look like the neighborhood's 1920s sidewalks opens up. Across the room is a 48-foot wall of pocketing and sliding floor-to-ceiling glass doors flowing onto an expansive west-facing balcony. The result is a true indoor-outdoor living space overlooking the canyon and the large backyard below. Birds race by at eve level. Hawks circle beyond. A large, hexagonal burnt-gold-



#### Rear elevation of the Rosa-Clark home.

upholstered couch - a 1960s original that Rosa found on Craig's List - anchors one side of the room. A mahogany dining table that seats 10 separates it from the kitchen with its 15-foot bright white guartz-topped island that seats five. The east-facing patio next to the kitchen black cat Queenie's turf provides cross ventilation, thanks to ocean breezes that pass over the canyon and yard and cool the house in warm weather.

Rosa explained that he designed the house to act like a funnel and catch the breezes to blow through it. And while you'd think that summer afternoon sun would counteract those breezes, Rosa designed 15-foot overhangs that block the sun from hitting the windows, including those facing south.

"The sun doesn't even hit the glass until it's ready to set," he said.

Solid steel shutters set in the wall of the balcony can control air flow, and all of the windows, made with Low-E (low-emissivity) 366 glass, also have automatic roller shades to block the glare. Rosa and Clark can control the shades when they're not home via an app on their iPhones.

Rosa and Clark do have air conditioning for those days when the breezes fail to appear or the heat is just too unbearable, but they also installed a 7-kilowatt solar system that fully powers both their home and their electric car. During cooler months, a radiant gas fireplace faced with lava tiles that reflect Rosa's Hawaiian heritage, warms the great room. The heat from the fire extends 15 feet out, and ducts bring the warm air up and out through vents. The home's gas furnace can also kick in. Rosa selected a highly efficient model controlled by Nest energy-saving thermostats.

Over the house, the leaky roof is a memory. In its place is a class-A, certified "Cool Roof," a bright white thermoplastic polyolef in (TPO) roof that reflects heat. Just below is an attic space ventilated with two Quiet Cool Attic ventilation systems that reduce attic heat. The ceilings and walls are insulated. An interior Indoor Air Quality (IAQ) fan runs continuously to bring fresh air into every room of the house.

These days, living on a canyon can cause anxiety about fire. Having built a concrete house for a client who lost hers to fire, Rosa gave a lot of thought to materials that would protect the structure of his family's home. Concrete was far too pricey for the couple, so instead he chose noncombustible steel, lava tile, stucco and that new mod

The interior design is as sleek and environmentally friendly as the structure, with

those concrete-style tiles sporting 40 percent recycled content, along with recycled oiled Forest Stewardship Council-certified teak floors from Indonesia installed throughout the rest of the house. The interior is painted with low-VOC acrylic paint. What you don't see in the bathrooms' clean design from the large free-standing tub in the master bath to the envv-inducing oversized showers — is plumbing that sends gravwater from all the showers and sinks — as well as the laundry room – down a level to the yard to irrigate different areas of landscaping. Roof water is also piped and directed to landscape planters. And, uniquely, Rosa dug out a space at the far end of the yard to create a dry-well reservoir that's covered by an in-ground trampoline for Kaleo. Any water collected in the reservoir can naturally seep into the ground. But Rosa and Clark don't need much anyway, nor do they have any need for conventional irrigation, because they grow drought-tolerant plants and succulents.

With the home construction just completed last June, full landscaping of the backyard is still to come, although there are spots filled with succulents and trees. There are also two additional structures — two tall modernist play forts for Kaleo that Rosa built with his help. Rosa added solar to both forts, which are constructed from recycled building materials.

Rosa noted that during construction 100 percent of the debris was recycled. And he did some of the construction work himself, including the exterior steel and concrete staircase leading to the backyard from the great room balcony.

While waiting nine years not to mention the year it took to finally build their dream home – was a challenge, it turned out that it gave Rosa and Clark the time they needed to get their plans just right. "Those nine years helped us figure out how we lived in the space." Rosa said. "Now we live in a home that's all glass and wide open. That's how we live. Wide open. It's like we're in a treehouse. A friend visiting recently said it's like Hawaii, with the breezes flowing through the house."

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