

CUSTOM BUILDER™

MAY 08

SHARP ANGLES

A SCULPTURAL CUSTOM HOME
BLURS THE LINE BETWEEN
INDOORS AND OUTDOORS

www.CustomBuilderOnline.com



UNIVERSAL DESIGN
SERVES THE BOOMERS 16
DON'T YELL: SELLING
TO THE OLDER CLIENT 24

PERIODICAL

 Reed Business Information



Modern Marvel

This home in the Arizona desert has a most unusual feature: a stream of water that aligns with the sunrise on the summer solstice.

BY SUSAN BADY, SENIOR EDITOR, DESIGN

The orientation of a home on a building site is always critical for maximizing views and natural light. But this Scottsdale, Ariz., residence may be the only one that aligns with the sunrise on the summer solstice.

Though one of the clients is an astronomy buff, the idea to align the home with the summer solstice actually originated with architect Lee Hutchison and senior designer Peter Bergsneider of Urban Design Associates in Scottsdale. "[The client] wasn't specific about this

alignment in the conceptual phases, but he recognized and appreciated its significance immediately," says Hutchison. "We designed a special outdoor room for his telescope that has a track so it can easily be moved."

A stream of water starts out at one end of the house, runs through the great room and foyer in a glass-covered trough, and ends in a reflecting pool. The stream lines up with the point on the horizon where the sun rises on the summer solstice, which occurs on either June 20 or 21 depending on the year.

To make this design element work, RS Homes hired a civil engineer with an understanding of astronomy.

"We found that the summer solstice line varies based on the longitude and latitude of the house," says Bruce Jackson, vice president of construction for RS Homes in Scottsdale. "The engineer also had to take into account the hills and mountains behind the house to project the exact point where the sun would break the horizon line."

Jackson was among those at the site on June 21, 2005, just before



A stream of water cuts across the great room and foyer (left), aligning precisely with that point on the horizon where the sun rises on the summer solstice. The covered patio off the dining room (above) provides sweeping desert views while offering protection from the sun.

sunrise. The foundations had been built as well as the swimming pool and water feature. "We were all waiting patiently for the sun to rise to see if the civil engineer's hard work and astronomical calculations were correct," he says. "To everyone's delight, the sun cracked the horizon perfectly in line with the water feature."

The summer solstice watch has since become an annual event.

Minimal Clutter

The site consists of two lots replatted as one. It totals just over three acres, but nearly half of that is open space, left undisturbed to preserve the desert's natural beauty. An existing wash ran

between the two lots. The main house was placed on the side of the wash and the garage/guest house on the other. A long, linear bridge spans the wash, connecting the two buildings.

The main house has 3,150 square feet of living space. The guest house adds another 1,000 square feet of living area.

The couple who own the house intended it to be their retirement home and spent several years roughing out, then perfecting the design. "They had very specific criteria," Hutchison says. "They wanted to maintain the privacy of the main house by locating guests outside their living space. Also, they didn't want business to encroach on the main living area, so the office was

incorporated into the guest quarters." The only bedroom in the main house is the master bedroom. In addition to a bedroom, full bath and office, the guest house is also equipped with an exercise room and its own covered patio. (The "telescope room" is adjacent to the guest house's powder room.)

The walls of all the perimeter rooms open to views. Hallways are minimized and function is maximized throughout. Only the master bedroom has a separate closet because the clients are averse to clutter and wanted to consolidate storage space in one internal, convenient location. The result was a space called "central storage," where racks are used to store pots and pans;



Bridging a wash on a double lot, this modern residence hugs the landscape (top) with minimal disturbance of the natural surroundings. Light wells, painted purple, were punched into the stucco walls and provide visual interest (above).

...serving platters; laundry and cleaning supplies; audio-visual equipment; and more. This method of consolidating also reduced construction costs in the kitchen and eliminated the need for a separate utility area, Hutchison says.

While the concept of central storage may not be for everybody, for these clients, "it was genius," says interior designer KT Tamm of Tamm Marlowe Design Studio in Scottsdale, Ariz. "It incorporates all the functions of daily

living into a central space and made use of what limited space they had for storage. The laundry equipment is back in one corner, and elsewhere there's storage space for luggage; kitchen storage; and arts and crafts and gift-wrapping materials — all within a couple of steps of each other."

Jackson notes that the extensive use of plate glass introduced many design challenges. Glass runs from floor to ceiling in the great room and other

main living areas. "This was not your typical floor-to-ceiling installation where there is a metal frame at the top and bottom," he says. "We had to come up with a way to hide the frames. The glass needed to come directly out of the concrete floor and disappear into the ceiling. It required precise placement of the bottom portions of the frame."

Prior to pouring the slab, the bottom portions of the window frames were recessed into the concrete and the top portions up into the ceiling. "This technique created a unique look that I have not seen before," Jackson says. The large windows are made of custom butt glazed glass, meaning there are no structural supporting mullions between the vertical edges to impede views.

Another challenge was the large cantilevered roof that extends over the plate glass windows. "This roof had a live-load deflection of up to 1-3/4 inches," he says. "We spent a lot of time working with our glazing contractor to develop a custom window frame that would allow for the roof deflection without shattering the glass."

Artfully Designed

Tamm Marlowe Design Studio started working on the interior design even before the foundation was poured. "Typically, after the architect has his



There's no room for clutter in the sleek, compact kitchen and breakfast room; most storage is in a central location on the opposite side of the wall.

preliminary floor plans down pat and is happy with how it works with the site and the client's vision, we're invited to come in and start participating," says Tamm.

These clients knew their art collection would have a significant impact on the home's design. "The house is probably a good 60 percent glass, which doesn't leave a lot of space to hang large pieces of art," she says.

"So early on, walls were designated for specific art pieces. Then we had to make sure the appropriate lighting was in place to highlight and showcase the artwork."

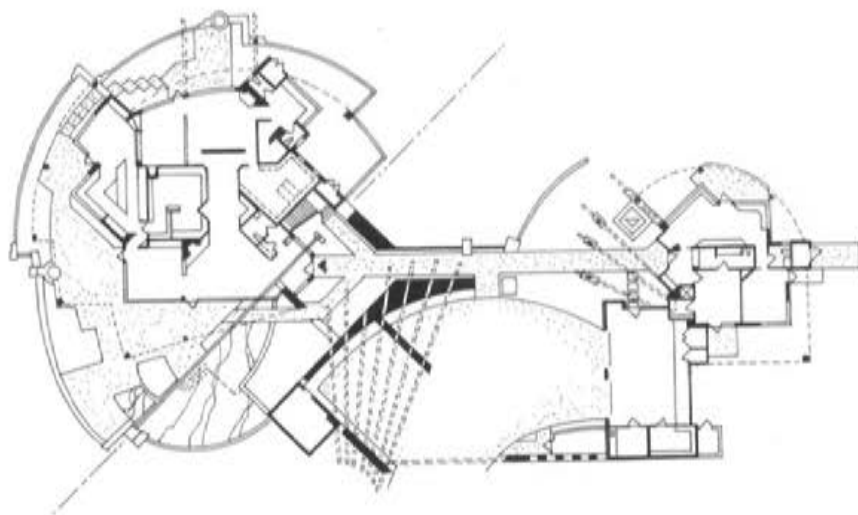
Hutchison worked out the lighting plan with input from Tamm Marlowe. The interior design firm also collaborated with the clients and the architect on the color palette, furniture placement, tile work and kitchen design.

The vivid color choices stemmed from the clients' preference for primary colors. "This wasn't going to be a desert-hue palette whatsoever," says Tamm. Purples and reds are dominant, with splashes of blue, green and orange. On the approach to the front door, light wells, painted purple, break up long expanses of stucco wall.

The clients' input extended to furniture as well. For example, the astronomy-loving spouse, who is also an engineer, designed the S-curve sectional sofa in the living room. "He worked out all the curves and angles on his computer," she says. Outdoor spaces were designed with just as much forethought and care. There are covered patios off the dining room and master bedroom, a sun deck near the negative-edge pool and spa, and an outdoor kitchen with a built-in barbecue grill and fireplace. Even the guest house has its own covered patio.

"It's a very compact home, yet it has an open, spacious flow that the clients have filled with vibrant color, making it a very warm, inviting environment," Hutchison observes.

The home won a gold award for Best One-of-a-Kind Custom Home, 4,001 to 6,500 square feet, in the 2007 Best in American Living Awards. **CB**



CUSTOM BUILT HOME

Style of Home: Contemporary

Location: Scottsdale, Ariz.

Total Square Footage: 4,150

Architect: Urban Design Associates, Scottsdale, Ariz.

Builder: RS Homes, Scottsdale, Ariz.

Interior Designer: Tamm Marlowe Design Studio, Scottsdale, Ariz.

Major Products Used: CABINETRY: Custom; DOORS: Fleetwood; FLOORING: Concrete; ROOFING: Polyurethane foam; SIDING: Stucco; WINDOWS: Ever-Ready Glass of Phoenix (plate glass windows), Fleetwood

PHOTOGRAPHY BY DINO TONN