

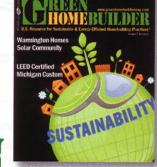
FEATURES

- **Project Profile-Vantage** Warmington Homes is on the cutting edge of green development with Vantage, the first fully-solar community in the Bay Area. By Matt Walsh
- **Custom Green:** This award-winning Energy Star home in Michigan demonstrates the impressive combination of beauty and energy efficiency. By Bob Hicks
- Project Profile IndigoMODERN The developers of this Tuscon community combine creative design, a central location and responsible density with green building principles. By Jenn Sherman
- **Preservation through Conservation** Development can open doors to environmentally sensitive land. Conservation development is gaining popularity in the Western United States as builders realize the advantages of this type of building. By Christine Rombouts
- The Latest and Greatest in Green Products From bamboo flooring to energy efficient windows, we are proud to showcase some of the newest ways to build green. Compiled by Matt Walsh

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On the Cover

William Lyon Homes leads the way in Green Building with their newest communities in Ladera Ranch, Calif.







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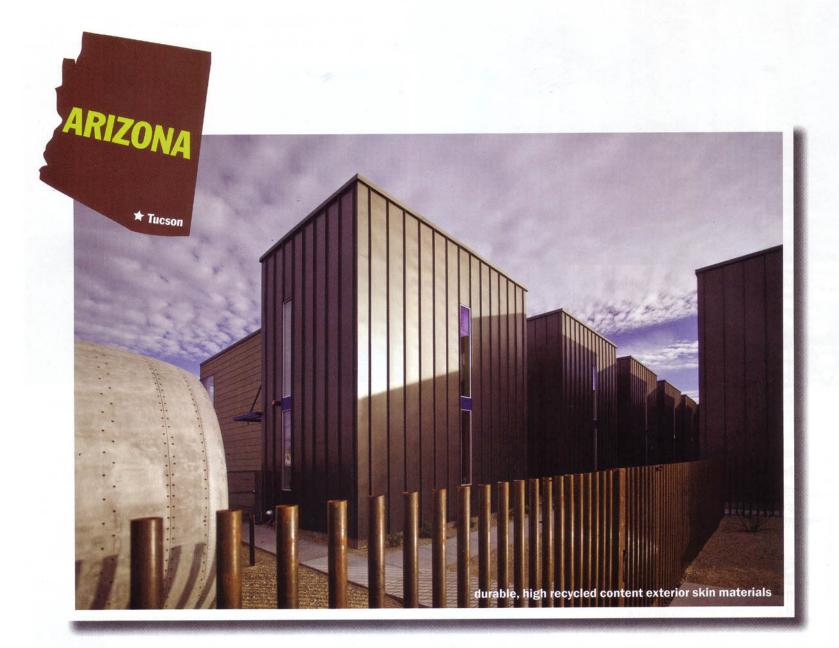
view through salvaged jet engine cowling

BREAKING NEW GROUND IN TUCSON

IndigoMODERN brings a new look to green housing in Arizona.

BY JENN SHERMAN





ne developers of indigoMODERN were no strangers to being ahead of the curve in Tucson. Having recently completed the first residential loft conversion in Tucson with the 51-unit Ice House Lofts, along with the nine-unit metal clad residential project with Barrio Metalico, they were ready for a new challenge. Historically, "Green" building in Tucson is situated in the middle of the desert and designed in a more traditional style; these developers wanted to change that paradigm.

IndigoMODERN was born from the idea that good design can make your life better. A well-designed home is important: all spaces are carefully designed to feel bright, open and spacious; the materials and design maximize energy-efficiency; and green design features are included throughout. The units are highly insulated and skinned with durable materials, pre-wired for photovoltaic power and pre-plumbed for solar hot water. Most importantly, the project takes an underused infill property and taps into the existing infrastructure and heart of a

desert city

"The way we see it, real sustainability is comprised of four components: location, density, energy efficiency and building materials," said Rob Paulus, architect and development partner for indigoMODERN."It is not truly sustainable if you have to drive miles and miles every day to and from your 'green' or off-the-grid home."

Paulus and partners Warren Michaels and Randi Dorman found two infill lots in the center of Tucson. The lots were located on a bike path leading to the University of Arizona, and were centrally located near shopping, restaurants and movies. However, one of the lots had a dilapidated duplex and the other was a mobile home park, which was not for sale.

"We loved the one site because of its central location and views of the mountains." said Michaels. "But we thought to ourselves that it would be tough to sell a high-end product across the street from the trailer park. So I approached the owner and two days later we had that under contract too."



Planning for the project was a simple and direct study in two basic concepts: separating cars and pedestrians while creating public and private paths and courtyards. Working within the confines of local zoning requirements, the project situates two rows of residences on either side of a central walkway that culminates in a communal pool area at the far end of each site. This primary path terminates with an eight-foot diameter jet engine cowling acquired from a local aircraft salvage yard. Perfectly round and unabashed, the cowling sculpture contrasts readily with the ninety-degree angles of the architecture to create a modern-day termination of axis.

Inside, the units are filled with light and space to complement a flexible plan. Custom cabinetry and a steel stair define clean lines, while windows are positioned to encompass the private courtyard space and the desert sky. Private balconies provide an unimpeded view of the Catalina Mountains to the north.

Relying on their past experience, the team found that denser living is more efficient living. However, they also understood some of the drawbacks of sharing walls. ceilings and floors with neighbors. In considering this dilemna. the team created the concept of "Responsible Density" where living spaces are dense enough to maximize site and energy efficiency and foster a sense of community, but where residents also have enough private space to live comfortably.

"Responsible density is an important concept," said Dorman. "It defines development within an infill neighborhood that pushes unit

salt water filtration poo

trellis balconies shade low-E glass

72 thick post-tension slab provdes excellent thermal mass



count beyond the norm, but within the context of great architecture."

Responsible density encourages community because it brings people together. It infuses a neighborhood with a high density of homeowners in a relatively small area rather than the standard one house-one lot scheme. This fosters a sense of community due to the closer living situations. It also creates a micro-climate between units to shade each unit and courtyard from each other, which is helpful in the desert where temperatures can be over 110 degrees in the summer.

The design and building materials of the home were all chosen to maximize energy efficiency. Starting with building orientation, fenestration and balcony/shade structures, the design allows maximum

> light to flow through the homes with minimum heat gain in warmer months. Pre-aged galvanized standing seam metal by Steelscape and concrete fiber board siding create a

> > durable exterior skin with an extremely long life. IndigoMODERN qualified for the Tucson Electric Power Comfort Guarantee, a program with the local power company in which they analyze the plans, test the construction, and guarantee a heating and cooling cost for the home. These 1,800 sq. ft. homes are guaranteed to have a monthly average heating and cooling bill of less than \$42 per month! The homes also were one of the first in Tucson to qualify for the Energy Efficiency Tax Credit.

In addition, all the homes all have low-e glass, blown-in recycled newspaper insulation, compact fluorescent light bulbs and Solatube skylights for

While the green aspects of the project were at the forefront as it was being developed, the developers dedicated even more though to the design and liveability of each unit and to the community as a whole.



interior spaces filled with natural daylight and finished with low v.o.c. products provided energy efficient, healthy environments.

"indigoModern functions well, and the architectural style is well thought through...this suits our lifestyle," said M. Karin Shipman, owner and president of EGI Development and also an indigoMODERN resident. "We like that Rob experiments with industrial materials. His use of natural light, reminds us of the 'case study houses' and we also appreciate his efforts to incorporate environmental (green) design concepts."

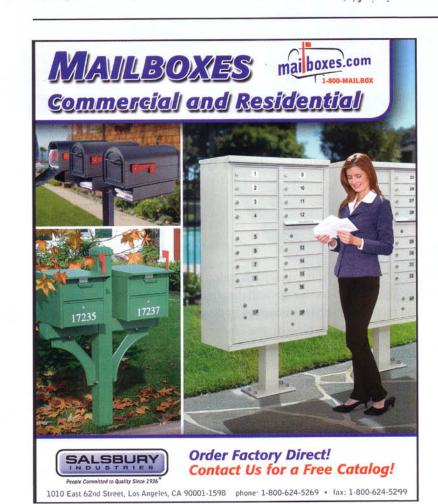
· The design is unlike anything else in Tucson, and stands out from other green developments that were already in existence.



native desert landscaping supported by rainwater harvesting tanks create naturally shaded exterior spaces

"There are plenty of people in Tucson who cater to the tastes of the masses," said Paulus. "We think it is much more interesting to push the envelope whenever possible, and it is especially rewarding when we can do that with "green" design."

Jenn Sherman is the editor of Green Home Builder magazine and may be contacted at jsherman@penpubinc.com.





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