

3001 North Bay Road Miami Beach FL



3001 represents the perfect case study for how we go about our business. "Going Green" can be expensive, confusing and overwhelming. We take a gradual, tiered approach to the process by first doing a survey of your office or place of business and then recommending solutions to fit your needs. With 3001 we started small, first installing our GESPER unit which helps to regulate the flow of electricity coming into the home, acts as a whole home surge protector and absorbs excess heat in the lines, allowing your appliances to perform better and longer. Our next step was to re-paint the roof with our reflective ceramic Hy-Tech paint which reflects heat from the home, lowering A/C loads. With lighting upgrades and a Green Switch power management system virtually all "wasted or phantom power" was eliminated which allowed us to pinpoint the actual power needs for the home. There is a frightening amount of power we consume that we really don't need, part of our philosophy is to reduce your energy consumption without effecting the comfort level at which you are used to living and working. Our final step which we are in the process of permitting is to eventually take the home "Off Grid" enabling it to be completely self sufficient year round. The home will still be hooked up to Florida Power and Light, but it's primary power source will be solar.

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Thin rooftop panels help house produce its own power

BY GEORGIA TASKER

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With South Florida already setting summer heat records, power bills may set even higher records this summer. But Ken Fields, who lives in a three-bedroom, three-bath house on Miami Beach, has just installed a roof-top photovoltaic system and is dramatically reducing his energy consumption in a first step to going off the grid.

"If you have the ability to do it, you should do it," he said. "As far as the building department knows, I'm the only person" to get a permit for solar power in Miami Beach.

Fields' system is not the usual set of glass-covered rooftop panels. The photovoltaics have been compressed into a thin membrane that is flexible enough to roll up -- or unroll in long sheets across his roof.

To cool his 2,800-square-foot home, his average electric bill has been almost \$700 a month because "I like it cold. I'm a New England boy; I like the thermostat set at 65 degrees."

A real estate investor and owner of Uruguay Steaks -- an online purveyor of steaks from grass-fed cattle on his 1,400-acre ranch -- Fields has been in Florida six years. He moved from New York City to own and operate The Creek hotel on the Beach. When he sold that, he bought the land in Uruguay.

Three years ago, he bought his house, upgraded the appliances to Energy Star efficiency and decided to investigate solar power.

After a lot of online research, he found John Novar in Pinecrest,

founder of Green Energy Products, a distributor of several energy-saving technologies.

His company website is <http://Green-Energy-Products.com>

'I called him up and said `What can I do?' " Fields said.

Novar could offer advice because of all he had done to his own house.

In 2005, Novar decided to reduce his energy consumption "when my energy bill went through the roof." But his roof, it turned out, didn't have enough room for all the panels it would take to power his house.

So Novar tried reducing energy consumption.

The first and easiest step was to change light bulbs, replacing incandescent, heat-generating bulbs with compact fluorescents, also called CFL bulbs.

"When I replaced the bulbs in the kitchen, it was really dark," Novar said last week. ``Then, I was on a cruise ship and noticed that in our room there was only one light but it was bright. That light had a reflector around it."

Reflectors not only brighten Novar's kitchen CFL bulbs, they keep out hot air from the attic with a lip that fits snugly over the opening.

A ceiling fan in Novar's kitchen has thermodynamically designed blades and runs on a thermostat. The Gossamer Wind fan, manufactured by Hampton Bay and sold at Home Depot, turns itself off and on at a preset temperature and requires less energy to run.

Next, Novar installed a GESPER unit. The device (Green Energy Surge Protector and Energy Reducer) is a surge protector as well as a product that reduces the amount of electricity coming from the power company without affecting the amount usable in the home. It reduces the monthly electric bill by at least 10 percent, Novar said, by evening power surges and spikes.

Novar also installed a tankless water heater, which uses energy only on demand, and a dual-flush toilet, which uses a small amount of

water for liquid waste and a greater amount for solids.

Finally, he coated his roof and exterior walls with ceramic insulating paint called Hy-Tech Roof Coatings. Instead of replacing a shingle roof that Hurricane Wilma damaged (estimates were \$15,000 to \$35,000 for a new roof) Novar spent \$4,000 on the paint to bounce heat away, a sealant to cover the roof, and he replaced missing shingles.

One day recently, the exterior temperature of the house measured 93 degrees, while the interior walls were at 75 degrees. "And I set the thermostat at 80 degrees," he said.

One reason Novar is able to keep cool with the thermostat set high is a new air conditioning unit by Trane that reduces humidity, allowing you to feel cooler at higher temperatures.

All of these remedies, which cost him more than \$20,000, have reduced his electric bill by 61 percent. He is saving for the solar technology that Fields purchased. "The pay-off is in the years to come," he said.

Once Fields heard about all of Novar's energy savings, he decided not only to follow the advice and install the solar system, but to invest in Novar's company.

Over three May days, flexible photovoltaic laminate was unrolled and glued into place on Fields' roof; the inverter and meter panels were installed, and the PV system was in place. Cost: \$50,000.

Not long after the installation, Fields reported on his blog (3001northbayroad.com) that it was generating 4,300 watts in midafternoon. But a storm produced a heavy downpour, dropping the output to 1,600 watts. When the rain stopped, a haze settled in and the power production dropped to eight watts.

While he still is on the grid for power at night and when he needs it, his system may be expanded to include backup batteries and even more panels to catch more sun power. It will take a few months to find out how much the system is saving him in electricity.

"I think what we can expect is that it will be a 40 to 50 percent drop in the electric bill," Fields said.

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