



Solar Energy Management workers install flexible, thin, lightweight solar panels on the roof of Aurora's Headquarters 19329 U.S. 19 N. in Clearwater.

CUTTING-EDGE SOLAR PANELS INSTALLED ON CLEARWATER BUILDING'S ROOF

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By Terri Bryce Reeves, Times Correspondent Saturday, June 19, 2010

CLEARWATER — As the oil well spews its toxic stew into the Gulf of Mexico, calls for renewable energy alternatives are hitting a fever pitch on the cable television talk shows. But for one local company, clean energy is more than just talk.

Friday, workers were busy atop the Aurora Lighting building at 19329 U.S. 19 N in Clearwater installing flexible, thin, lightweight solar modules called Uni-Solar Photovoltaic Laminates. "This is a peel-and-stick application that works in sun or shade and is resistant to hurricane winds and wind uplift in general," said Scott McIntyre, president of Solar Energy Management, the St. Petersburg-based contractor installing the system. "It's perfect for Florida."

Unlike traditional solar panels, which are often rigid and mounted on racks, these panels are slim — only one-fifth of an inch deep. Installers basically roll them out, peel the paper backing off the membrane and stick the membrane to a flat roofing surface. Some might say it's so easy a caveman could do it. The technology, however, is a bit more advanced. Each Uni-Solar panel, 15.5 inches wide and 18 feet long, is embedded with tiny photovoltaic cells, which convert solar energy into power. The 180 solar sheets covering 4,800 square feet on this rooftop will provide 25,000 kilowatts of energy when they are functional, starting Tuesday. Each panel comes with cables that connect with the building's power supply.

The installation is expected to provide about one-third of the 11,000-square-foot building's total energy requirements. Uni-Solar photovoltaic laminates are manufactured by United Solar Ovonic, a subsidiary of Energy Conversion Devices Inc. "This is one of the largest installations of Uni-Solar panels in Pinellas County," said Kyle Burdine, service director for Ramcon, the roofing contractor that just finished installing an energy-efficient white roof on Aurora's building. Ramcon is assisting in the coordination of the roof's energy makeover.

The new cool roof is just one facet of Aurora's strategy to turn its building, built in 1982, into a clean energy hub. The company plans to install long-lasting, low-energy LED lights throughout the building as well. The cost of installing the Uni-Solar panels is about \$100,000, said Colin Gemmell, president of Aurora Lighting. He said he expects that between government rebates and tax incentives, the net cost will be zero.

The building houses the North American headquarters for Aurora, an international company that specializes in low-energy lighting. Aurora also owns a 50 percent interest in the Arbor Shoreline Business Park, where the company is located in Clearwater, and plans to turn the whole complex into an eco business park featuring green buildings sheltered with cool roofs, powered by solar energy and illuminated with LED lighting.

Free "lunch and learn" seminars will be offered to area businesses in the future. In the meantime, solar energy technologies continue to evolve. Kind of like the caveman.

"The sun radiates enough energy in one hour onto the Earth to meet all our (the human race's) energy requirements for a year," McIntyre said. "We're just not smart enough — yet — to harness it."