

The Green Guide

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Green Project Highlight: HOK Chicago Office Relocation: LEED Platinum for Commercial Interiors



As Cotter Consulting continues to add LEED certified projects to its resume I would like to highlight a project that was awarded LEED Platinum Certification earlier this year. Cotter Consulting served as the commissioning authority for the HOK Chicago Office Relocation project that was started in 2008 and was completed in 2009. There are only four LEED for Commercial Interiors Platinum certified projects in Illinois at the moment and this brings the total overall number of LEED Platinum projects that Cotter has been involved with up to three.

The project is located on the 14th floor of 60 E Van Buren St., here in Chicago. The 15,969 sq ft renovation now serves as the showcase for HOK's past work and vision for the future. It is used as a space for learning about sustainable design and other topics relevant to the industry.

Commissioning as the LEED reference guide defines it is the verification that a project's energy related systems are installed, calibrated and perform as intended. Fundamental commissioning of a project is required to become eligible for LEED certification and is included as a prerequisite in the Energy and Atmosphere section of the LEED rating system. Since this project was pursuing LEED Platinum the enhanced commissioning credit was pursued for an additional point.

Jerrick Simbol served as the primary commissioning authority on the project. The systems commissioned included the exhaust fans, fan coil units, computer room AC unit, fan powered and variable air volume (VAV) terminal units, domestic water system and the lighting controls.

Jerrick and the Cotter Cx team provided the services to fulfill the requirements set by LEED which include but are not limited to:

- Design Phase: Plan reviews, documentation or review of the Owner's Project Requirements (OPR) and Basis of Design (BOD), provide the commissioning specifications for inclusion in project documents
- Construction Phase: Development of Cx plan including prefunctional and functional checklists for each piece of equipment in the commissioning scope, submittal reviews, site visits to identify deficiencies before they become problems, review O&M manuals for completion and accuracy
- Close-out Phase: Perform functional tests to verify equipment meets OPR and BOD requirements, develop re-commissioning manual, develop a final commissioning report, verify training, return 8-10 months later to re-commission

Cotter Consulting may soon be able to claim we have provided the commissioning services for 2 out of only 5 LEED for CI Platinum certified projects in the state as we are currently working on another project targeting Platinum certification scheduled for completion this winter.

Green Product Highlight: GALE Wind Turbines supplied locally by Bright Idea Energy Solutions

Some of you may remember reading about the 7th and 10th Ward Yard project in Cotter's latest company newsletter. This project pursued LEED Gold certification with a design that incorporated several planet friendly technologies and strategies. Besides the green features included in most new building designs these days, the project took additional steps to decrease the energy consumption by adding 4 vertical axis wind turbines.

Each of the GALE wind turbines provided by Bright Idea Energy Solutions supplies renewable energy on site for immediate use by the facility. As the turbine spins it produces a 3 phase AC current which is then converted to high voltage DC power and fed to electrical panels on site to be used or fed back into the electrical grid. This line of wind turbines can produce electricity with winds as light as 4 mph up to 130 mph, depending on the model. Currently there are 5 models being produced by Tangerie Alternative Power and they vary in size from approximately 5 ft to 15 ft in height. Technical data sheets claim the vertical fiberglass blades produce 30-50% more power than conventional propeller type wind turbines. The turbines installed at the 7th and 10th Ward have the potential to produce 78,000 KWHr per year for the site. Any excess power fed back into the ComEd grid results in a credit for the city's account.

The decision to add the turbines was made during construction and is the first wind farm application for a City of Chicago facility. The turbines are expected to help off-set the facility's carbon foot print during the months of October through April.

For more information, visit the Tangerie Alternative Power website at:
<http://www.tangarie.com/>

Home: Energy saving tips for Thanksgiving Meal Preparation

As many of you are preparing to host or attend a holiday event this week I thought it would be appropriate to include a few Thanksgiving meal preparation energy saving tips. Although these may seem like common sense to some of you don't underestimate the effects that hosting a group of people while cooking the perfect meal can have on a person's decision making and awareness.

So in the spirit of Thanksgiving I give you the "Five Ways to Save Energy in the Kitchen While Cooking Thanksgiving Dinner". Courtesy of www.planetgreen.discovery.com

- 1. KEEP THE OVEN DOOR SHUT!** As tempting as it may be to keep checking on the food in the oven, each time the door is opened heat is released and the temperature inside the oven drops. This leads to wasted energy and longer cooking times. Stop looking at the food!!!
- 2. Stuff the oven.** This tip can save you time and energy. Put as many dishes/baked goods/entrees as possible in the oven at the same time if the cooking temperatures allow it. Instead of waiting for each dish to finish before tossing in the next one you can keep the oven going for a shorter period of time. Do remember to leave enough space to let the heat circulate around the dishes though.
- 3. Use the microwave.** This might go against the family's 80 year old recipe but some side dishes cook just as well in the microwave as in the oven. Your guests will never know the difference. Microwaves use a fraction of the energy that ovens do.
- 4. Use the proper stove top burner.** Try to match the pot/pan size to the burner. A small pot sitting on the large burner wastes energy as the heat dissipates around the pot into the air inefficiently. You may also want to watch the amount of water needed for boiling. Using more water means using more energy and time to boil.
- 5. Load up the dishwasher.** By the end of the day the dishes have piled up in the sink and washing each one by one would waste a large amount of water. Instead of rinsing the dishes, scrape them off into the trash (or compost) and use the dishwasher. Wash full loads only and if your washer has it, use the low-heat or energy saver options now to increase the efficiency. Of course some dishes need to be hand washed but these should be the exception.

THAT'S IT FOR THIS ISSUE!

Enjoy the Holiday!