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POLLUTION PREVENTION VIEW  
A Newsletter from the Connecticut Department of Environmental Protection

SUMMER 2004

# Green Buildings

## Have Arrived in Connecticut



**Mark Twain once said, "Architects cannot teach nature anything." How appropriate that the new museum center for the Mark Twain House has nature teaching the architects.**

DEP Deputy Commissioner David Leff recently presented a GreenCircle award to John Boyer, the Mark Twain House and Museum's Executive Director, for the many ways the new museum is working with nature in its design. **The award recognized the Twain Museum as being the first "green" building in the state and the first "green" museum in the country.** Green buildings are better for the environment and can be certified using the Leadership in Energy and Environmental Design (LEED) standards.

"The Twain Museum is unique in that it is built in an urban setting and fits into the natural environment of the neighborhood. The building is nestled into a hillside and provides 33,000 square feet of space in an unobtrusive way. One of the prominent green features is the use of natural light, known as daylighting, to illuminate lower levels. The building integrates with the natural environment and does not overshadow it," said Deputy Commissioner Leff. **"The DEP is proud to present a GreenCircle Award in recognition of a first of its kind building in Connecticut.** The building sets an inspiring example for builders of other public facilities."

The GreenCircle award was presented at an April 19th celebration held at the new museum. In addition to the DEP award, the Twain Museum was presented with its LEED certification from the United States Green Building Council, which the museum received through incorporation of a variety of energy-saving and eco-design features. These include geothermal wells for heating and cooling; a closed-loop water system to eliminate evaporation; a heating, ventilation and cooling system that is nearly 30% more energy efficient than building code; recycled material content exceeding 25% throughout the project; enhanced indoor air quality through zoning and air filtration; and low-impact exterior lighting. **The CT Green Building Council presented the museum with an award for Environmental Leadership in becoming the first LEED-certified building in the state.**

"Mark Twain was fascinated by technology, and incorporated the latest inventions in his home in Hartford", said the Executive Director Boyer. "I think he would have appreciated the fact that a museum, dedicated to his life and legacy, is being honored for its cutting-edge environmental design."

The new museum is located on the grounds of Mark Twain's restored Hartford home at 351 Farmington Avenue.

**For more visitor information, go to [www.marktwainhouse.org](http://www.marktwainhouse.org) or call (860) 247-0998. For more information on green buildings, go to [www.CTGBC.org](http://www.CTGBC.org) and [www.usgbc.org](http://www.usgbc.org).** ■

# COOL IT... and save energy

Summer is right around the corner. Along with those glorious sunny days come those hazy, hot, and humid days that may compel you to buy a new air conditioner. But what size is the right size and what the heck is a BTU anyway? Is a 10,000 BTU system twice as good as a 5,000 BTU system? Not necessarily. Buying an air conditioning unit that is oversized is less effective and a waste of money at the time of purchase and every time you pay your electric bill.

Air conditioners work by removing both heat and humidity from the air. A unit that is too big will cool the room so quickly that it doesn't have the time to remove the humidity. As a result, the unit will keep switching on and off while your room stills feel wet and clammy.

## So how do you choose the correct size air conditioner?

**1. Determine the square footage of the area to be cooled. Find the square footage of the room (length of the room multiplied by the width) on the chart below and determine the correct cooling capacity in BTUs (British Thermal Units) per hour.**

Area (sq. ft)	Capacity (BTUs/hr)
100 to 150	5,000
150 to 250	6,000
250 to 300	7,000
300 to 350	8,000
350 to 400	9,000
400 to 450	10,000
450 to 500	12,000
500 to 700	14,000
700 to 1,000	18,000

**2. Make adjustments for the following circumstances:**

- If the room is heavily shaded, reduce capacity by 10 percent.
- If the room is very sunny, increase capacity by 10 percent.



- If more than two people regularly occupy the room, add 600 BTUs for each additional person.
- If the unit is used in a kitchen, increase capacity by 4,000 BTUs.

**For example, you want to cool a 10 ft by 12 ft bedroom that is on the sunny side of the house (south side) and is occupied by two people.**

- Total square footage =  
10 ft x 12 ft = 120 sq. ft
- For the sunny room =  
120 sq. ft x .10 (10%) = 12 sq. ft  
120 + 12 = 132 sq. ft
- Checking the chart above, a 5,000 BTU system is sufficient.

When you get to the store, look for the units that have your correct cooling capacity and compare the yellow energy guide labels. These labels will help you compare the energy use of similar models and estimate annual operating costs. Select the unit with the highest Energy Efficiency Ratio (EER) for greater savings.

Also look to see if the unit has the ENERGY STAR logo, indicating that the model meets strict energy efficiency guidelines set by the EPA and US Department of Energy. Replacing a 10-year-old room air conditioner with a new ENERGY STAR model saves an average of \$14 a year on your electric bill. That's because they use at least 10% less energy than conventional models. By choosing ENERGY STAR, you are helping prevent global warming and promoting cleaner air without sacrificing the product quality and performance.



## Did You Know?

**You could be eligible for a \$25 rebate on your purchase of an ENERGY STAR room air conditioner.**

Visit [www.cl-p.com/clpcommon/pdfs/companyinfo/publications/air\\_cond.pdf](http://www.cl-p.com/clpcommon/pdfs/companyinfo/publications/air_cond.pdf) or [www.energystar.gov/](http://www.energystar.gov/) for more information.

# Hosting a Green Event

With summer comes block parties, family reunions, workplace picnics, and town-wide festivals. It's also the time when many businesses and government agencies are planning fall seminars and workshops. Gatherings such as these can mean lots of trash to be disposed of as well as other environmental impacts. Thinking "green" ahead of time can make your event easier on the earth and your pocketbook.

## Tips for Greening Your Gathering



**INVITATIONS:** If your event is informal, can guests be invited by telephone or e-mail? If so, this saves paper and money. If you want to send invitations, consider sending the information on a postcard or a folded sheet of paper instead of using an envelope. Purchase paper that is at least 30% post-consumer recycled content.



**PLACE:** If you have a choice of where you hold your event, is there a place that is centrally located or is accessible by mass transit? If you will have guests that need overnight accommodations or if you are holding the event at a hotel conference center, research which facilities have programs in place that save water and energy and reduce solid waste. See [www.greenhotels.com/question.htm](http://www.greenhotels.com/question.htm) for a meeting planner's questionnaire that can help you choose a facility with environmentally preferable practices.



**FOOD:** Does your menu minimize the use of disposables and incorporate other ways to reduce waste? Some examples include: serving sandwiches and bite-size snacks – eliminating the need for utensils and providing pitchers of beverages instead of individual cans and bottles. Buy locally grown organic food whenever possible – this will reduce the use of pesticides and energy for production and transport.



**RECYCLE:** Are recycling receptacles located next to the trashcans and clearly labeled? Having a clear bag system for collecting cans and bottles works well at large events. The participants can see what goes where and it decreases the amount of trash that inadvertently gets thrown in with the recyclables. For more information on managing waste and recyclables at special event, visit [www.dnr.state.wi.us/org/aw/wm/publications/recycle/PUBL-CE-281-2001.pdf](http://www.dnr.state.wi.us/org/aw/wm/publications/recycle/PUBL-CE-281-2001.pdf).



**WANT MORE HELP?** Here are some tools to help you minimize the environmental impacts of your event –

Green Event Planning Guide: [www.bridgingthegap.org/pdfs/Green%20Event%20Manual.pdf](http://www.bridgingthegap.org/pdfs/Green%20Event%20Manual.pdf)  
Green Meetings: [www.epa.gov/oppt/greenmeetings/](http://www.epa.gov/oppt/greenmeetings/)  
Planning a Sustainable Event: [www.sustainable.org/information/susevent.html](http://www.sustainable.org/information/susevent.html)

## WHAT'S NEW IN P2?

FROM THE CONNECTICUT DEP

### New Parts Cleaning System Eliminates Hazardous Wastes A Pollution Prevention Case Study

The CT DEP has a new case study available that details how a vehicle maintenance facility reduced its operational costs and improved conditions for its workers while preventing pollution. In 1995 this Hartford facility replaced its solvent-based part washers with aqueous-based sink type units. These units eliminated the solvent hazardous waste stream, satisfied the mechanics' need for ease of use and maintained acceptable quality. In 2001 the facility achieved further cost savings by purchasing an automatic parts washer (dishwasher style unit). This new parts washer allows the mechanics to continue working on vehicles while the parts are cleaned automatically.

This case study is available by calling the DEP Office of Pollution Prevention at (860) 424-3297 or from DEP's website [www.dep.state.ct.us/wst/p2/](http://www.dep.state.ct.us/wst/p2/). Click on the "Business/Industry" link to see the entire list of available case studies of Connecticut companies.

## Mark Twain Celebration was a Green Event

The DEP along with others in the CT Green Building Council honored the new environmentally friendly Mark Twain House Museum Center with an elegant "green" event on April 19 in Hartford. The museum is located on a main city bus line so many guests could have taken transit to enjoy the festivities. Instead of hundreds of pieces of paper programming, the evening's agenda was displayed at the registration table. After the talks and awards, guests mingled in the atrium area and enjoyed bite-size hors d'oeuvres (only napkins, no plates!) and drinks in real glassware. Tours of the building completed the festivities.

# P 2 C A L E N D A R

## A S E L E C T I O N O F P 2 R E L A T E D E V E N T S

July 15, 2004

### Pool Timers and Other Controls for Residential Efficiency UI's SmartLiving Center, Orange

Learn about the importance of placing your pool on a timer and how much you can save by making the change at this free evening seminar. Also, learn the ways you can use occupancy sensors and other timers to help lower your energy bills. For more information, call (866) 762-7899 or visit [www.uinet.com/your\\_home/slcevents/Summer04.asp](http://www.uinet.com/your_home/slcevents/Summer04.asp).

July 19-23, 2004

### International Children's Conference on the Environment Connecticut College, New London

Children (ages 10-13) from around the world gather at this conference to learn about and discuss environmental topics. A Tall Ships Environmental Festival will begin on day three and includes an expo featuring environmentally friendly innovations. For more information, call (860) 437-0757 or visit [www.icc04.org](http://www.icc04.org).

September 12, 2004

### Taste! Organic Connecticut Topmost Herb Farm, Coventry

Attend educational seminars on organic farming and enjoy organic food and good music.

For more information, contact the Northeast Organic Farming Association at (203) 888-5146 or visit [www.ctnofa.org](http://www.ctnofa.org).



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