

---

# Building Green

## From the Ground Up

or Getting Greener:  
Steps To Improve Energy Efficiency in Your Current Home

an event sponsored by  
**Deerpath Farm**

---

[ Sunday, May 4<sup>th</sup>, 2pm ]

**WIN AN ENERGY STAR WASHER  
OR \$500 TOWARD ANY ENERGY STAR APPLIANCE!**

Please join us for the afternoon to learn about:

- What it means to build green
- Innovations in green products and appliances
- Making responsible site selection and landscaping choices
- Improving your home's energy efficiency—without starting over!
- How energy efficiency reduces your utility costs

**Featured Guests:**

**Frederick Phillips, FAIA - Frederick Phillips & Associates**

**William Sturm, AIA - Serena Sturm Architects**

**William Bickford, AIA - DePree Bickford Associates**

**Stephen Christy - Landscape Consultant**

**David Richmond - Environmental Community Consultants**

**Sharon Roscher - Marvin Windows**

**Individuals from the U.S. Green Building Council Chicago Chapter**

---

**RSVP**

312-204-5033 - lbickford@ksgmac.com

**Directions**

Route 60 west of I-94; Turn north onto Bennett Rd at Grainger stoplight

Turn right onto Farwell Rd; First house on the right; 26403 N. Farwell Rd

[www.visitdeerpathfarm.com](http://www.visitdeerpathfarm.com)

[www.deerpathfarm.com](http://www.deerpathfarm.com)



---

# Building Green

## From the Ground Up

or Getting Greener: Steps To Improve Energy Efficiency in Your Current Home

An event sponsored by **Deerpath Farm**

---

### **Frederick Phillips, FAIA - Frederick Phillips & Associates**

Rick is an award winning Chicago architect. He and his family created the conservation community Deerpath Farm with a strong emphasis on high quality design and environmental sensitivity. Under Rick's guidance, Deerpath Farm has become one of the best-preserved natural areas in the region.

### **William Sturm, AIA - Serena Sturm Architects**

In addition to being the co-founder of Serena Sturm Architects, Bill is also a recognized leader in the movement to promote environmentally sustainable architectural design and land planning, developing special expertise in resource efficient design.

### **William Bickford, AIA - DePree Bickford Associates**

Bill and his business partner have established their architectural firm in the industrial Elston Corridor of Chicago. Bill is currently working with clients on a green renovation project in the Lakeview neighborhood, which was among the first homes to be permitted through Chicago's Green Permit program. He has also designed a new construction green home in Steamboat Springs, Colorado.

### **Stephen Christy - Landscape and Ecological Consultant**

Stephen is the former director of Lake Forest Open Lands Association. He has been involved with the restoration and preservation of Deerpath Farm since the early 1980s. Stephen's expertise was integral in the planning of Deerpath Farm, and he continues to work with the Homeowners' Association on native species restoration and tree protection.

### **David Richmond, President - Environmental Community Consultants, Inc. (ECCI)**

Past president of the Energy & Environmental Building Association (EEBA). Dave has over 15 years experience in Energy Efficient design, construction and consulting specializing in "beyond Code" applications of energy efficient techniques and building science sensibilities. He is a certified RESNET Energy Rater for the EPA's Energy Star Program, DOE's Building America Initiative and a recognized Building Forensic Investigator.

### **Sharon Roscher - Marvin Windows**

Sharon is the Architectural Representative for Chicago and Southern Wisconsin, and she works mainly on historical and luxury projects. As a certified AIA presenter, Sharon has been educating architects and builders on sustainability and best building practices for over two years. Marvin was an ecologically friendly company before it was popular and was one of the first companies in Minnesota to win the Governors Excellence Award in waste and pollution prevention in 1996. In addition, Marvin is a supporter of the Green Task Force of the Window and Door Manufacturers Association.

### **U.S. Green Building Council**

The USGBC is a 501(c)(3) non profit organization that certifies sustainable businesses, homes, hospitals, schools, and neighborhoods. USGBC is dedicated to expanding green building practices and education, and its LEED® (Leadership in Energy and Environmental Design) Green Building Rating System™.



# Home Improvement: Improve Your Home's Energy Efficiency with ENERGY STAR



Making your home more energy efficient with ENERGY STAR can help to reduce high energy bills and improve comfort. Many common home problems like moisture on window panes; ice dams; peeling paint; and mold, can also often be solved by taking steps to improve energy efficiency.

Improving energy efficiency with ENERGY STAR is also an important first step in the growing trend of “green remodeling.” That’s because the energy we use in our homes often comes from the burning of fossil fuels at power plants, which contributes to smog, acid rain, and global warming. So, the less energy we use in our homes, the less air pollution we generate.

ENERGY STAR can guide you in making your home more energy efficient — whether you do-it-yourself or hire a qualified professional. Take these steps to get started or use the new ENERGY STAR Home Advisor to get specific, customized recommendations on how you can make your home more energy efficient, cut utility bills, and improve comfort — all while helping to protect the environment.

## Analyze your Home's Energy Use

If you have five minutes and your last 12 months of utility bills, use the ENERGY STAR Home Energy Yardstick to compare your home's energy efficiency to similar homes across the country and get recommendations for energy-saving home improvements from ENERGY STAR. Or, hire a professional to perform a comprehensive home energy audit.

## Air Seal and Insulate with ENERGY STAR Home Sealing

Sealing air leaks that cause uncomfortable drafts and adding insulation are two of the most cost-effective ways to improve the energy efficiency and comfort of your home. Use ENERGY STAR Home Sealing to guide you in making these improvements that every home should have.

## Heat and Cool Efficiently

Learn to make smart decisions about heating and cooling efficiently. Change your air filter regularly, install a programmable thermostat, seal your heating and cooling ducts, and consider installing ENERGY STAR qualified heating and cooling equipment.

## Choose ENERGY STAR Qualified Products

More than 50 types of products can earn the ENERGY STAR, including appliances, lighting, home electronics, and home office equipment. ENERGY STAR qualified products meet strict energy efficiency guidelines set by the U.S. EPA and U.S. Department of Energy. They use less energy, save money, and help protect the environment.

## Take the Whole House Approach with Home Performance

A whole-house assessment by a contractor participating in Home Performance with ENERGY STAR can uncover your home's performance problems and identify improvements that, when made together, can greatly improve your home's energy efficiency and comfort. The contractor can also help you get the work done right.



# ENERGY STAR Qualified New Homes



## Features of ENERGY STAR Qualified New Homes

### 1. Effective Insulation

Properly installed and inspected insulation in floors, walls, and attics ensures even temperatures throughout the house, reduced energy use, and increased comfort.

### 2. High-Performance Windows

Energy-efficient windows employ advanced technologies, such as protective coatings and improved frames, to help keep heat in during winter and out during summer. These windows also block damaging ultraviolet sunlight that can discolor carpets and furnishings.

### 3. Tight Construction and Ducts

Sealing holes and cracks in the home's "envelope" and in heating and cooling duct systems helps reduce drafts, moisture, dust, pollen, and noise. A tightly sealed home improves comfort and indoor air quality while reducing utility and maintenance.

### 4. Efficient Heating and Cooling Equipment

In addition to using less energy to operate, energy-efficient heating and cooling systems can be quieter, reduce indoor humidity, and improve the overall comfort of the home. When properly installed into a tightly sealed home, this equipment won't have to work so hard to heat and cool the home.

### 5. Efficient Products

ENERGY STAR qualified homes may also be equipped with ENERGY STAR qualified products — lighting fixtures, compact fluorescent bulbs, ventilation fans, and appliances, such as refrigerators, dishwashers, and washing machines.

### 6. Third-Party Verification

With the help of independent Home Energy Raters, ENERGY STAR builder partners choose the most appropriate energy-saving features for their homes. Additionally, raters conduct onsite testing and inspections to verify the energy efficiency measures, as well as insulation, air tightness, and duct sealing details.

## Benefits for Homeowners

### PEACE OF MIND

Home buying is complex enough without having to know all the details of energy-efficient construction. Instead, use ENERGY STAR to easily identify homes that are truly energy efficient.

### LOWER OWNERSHIP COST

Compared with standard homes, ENERGY STAR qualified homes use substantially less energy for heating, cooling, and water heating - delivering \$200 to \$400 in annual savings. Additional savings on maintenance can also be substantial. Financing your home purchase using an energy efficient mortgage may lead to savings as well.

### BETTER PERFORMANCE

Properly installed energy-efficient improvements deliver better protection against cold, heat, drafts,

moisture, pollution, and noise. Enjoy improved indoor air quality and greater durability.

### SMART INVESTMENT

By the end of the decade, more than 2 million homes are expected to earn the ENERGY STAR. The trend is clear. By choosing a home with the ENERGY STAR label, you can be confident that it will have an increasingly valued feature when the time comes to sell.

### ENVIRONMENTAL PROTECTION

Sixteen percent of U.S. greenhouse gas emissions are generated from the energy used in houses nationwide. The less energy we use in our homes, the less air pollution we generate.



# 16 WAYS TO GREEN YOUR HOME

## LOWER THE IMPACTS OF EVERYDAY LIVING

### Lower Your Utility Bills

#### 1. Switch to Compact Fluorescent Light Bulbs

Compact fluorescent light bulbs (CFLs) can be a huge energy saver. Replace some (or all) of your incandescent bulbs with fluorescents and enjoy reductions in heat production, energy use, and electric bills!

*Savings: Changing five of the most frequently used light bulbs in your home can save you \$100 per year on electric bills!*

#### 2. Program Your Thermostat

When you are at home, keep the thermostat at 78°F or higher in the summer and 62°F or lower in the winter. Programmable thermostats allow you to program the systems to reduce output when they are not needed (e.g., when no one is home during the day, or in the evening when everyone is sleeping).

*Savings: Reduce your energy bill by \$100 per year or more!*

#### 3. Plug Air Leaks

This simple step can go a long way toward keeping your home at the temperature you desire, saving money on heating and air conditioning bills and more. Common leaks occur around windows, doors, and other wall penetrations. Plugging those leaks with weather stripping and caulk can be a simple task for anyone!

*Savings: Reduce your energy bill by \$100 per year or more!*

#### 4. Tune Up Your Heating and Cooling (HVAC) System

Have a checkup for your HVAC system every 2 years to make sure it is running efficiently. Be sure to clean the filter monthly during times of peak usage; a dirty filter can significantly reduce the efficiency of your HVAC.

*Savings: Reduce your energy bill by \$100 per year or more!*

### Choose Green Products

#### 8. Buy Local

Buying local produce reduces the amount of fossil fuels required for the transportation of products from other parts of the country or the world. It also reduces the amount of plastic and paper products consumed in the packaging of such far-traveling products. Buying local reduces consumption of valuable natural resources.

#### 5. Choose ENERGY STAR® Appliances

ENERGY STAR® qualified products meet a high level of energy efficiency, which can translate into savings on electric bills. When considering the price of a new appliance, take into account not only the purchase price, but also the long-term savings associated with an energy-efficient appliance.

*Savings: Reduce your energy bill by \$50 per appliance per year or more!*

#### 6. Reduce Water Use

- Indoor: Use less water by adding aerators (available for a few dollars at your local home supply store) to your sink faucets and changing to low-flow showerheads.
- Outdoor: Incorporate native plants in your landscape plan and minimize high-maintenance landscaping such as turf grass to conserve water, while still maintaining a beautiful lawn. *Savings: Reduce your water bill by as much as \$100 per year!*

#### 7. Switch to Green Power

Green Power is an optional utility service for customers who want to help expand the production and distribution of renewable energy technologies. With green power, you do not have to change your electricity provider. Instead, customers choose to pay a premium on their electricity bill to cover the extra cost of purchasing clean, sustainable energy. More info on green power can be found at: <http://www.eere.energy.gov/greenpower/markets/index.shtml>.

#### 9. Use Low-VOC Products

Improve your indoor air quality by switching to products that don't give off "volatile organic compounds" (VOCs). Some common low-VOC or no-VOC products include:

- Paint: A low-VOC paint is available from most major paint brands
- Cleaning products: Low-VOC cleaning alternatives are available for sale, or you can make your

own VOC-free cleaning products using simple household materials like baking soda, vinegar and borax.

## 10. Use Wood Alternatives or FSC-certified Wood Products

The type of flooring and cabinetry materials you use can have a positive effect on your health and pocket-book while reducing your environmental impacts.

- Consider using environmentally preferable and rapidly renewable products such as linoleum, bamboo, recycled-content tile or non-VOC carpet.
- Choose wood products from sustainably man-

aged forests, such as those certified by the Forest Stewardship Council (FSC).

- Use locally sourced products when possible to reduce carbon emissions associated with the transportation of those products.

## 11. Use Rapidly Renewable Flooring Materials

Now there are affordable, durable, and rich-looking flooring options made from grasses and trees that mature in roughly half of the time (or less!) than it takes hardwoods to reach market size. Bamboo, cork, and eucalyptus flooring products are a sustainable alternative to traditional hardwoods.

## Green Your Yard

### 12. Plant Trees to Provide Shade and Wind Protection for Your House

This simple step can help you save money on heating and air conditioning bills while providing beautiful views around your home.

### 13. Use Native Plantings

Native plants have been growing and evolving in your area for thousands of years and, as a result, have adapted to the local soils and climate. As a result they are more likely to thrive with minimal care, unlike exotic plants. That can mean less need for water, fertilizer and pesticides. Additional info on green landscaping techniques can be found at: <http://www.epa.gov/reg3esd1/garden/>.

### 14. Use Nontoxic Gardening Techniques

Many gardeners over-apply or improperly apply pesticides, putting themselves, their families, and pets at increased health risk. Nearly half of all households have pesticides stored within reach of children. About 230,000 people each year are treated in hospital emergency rooms for injuries relating to various lawn and garden tools. Our clean air and drinking water are affected by pesticides and garden equipment emissions.

## Green Your Transportation

### 15. Carpool, Use Public Transportation, Walk or Bike When Possible

Environmental responsibility does not begin and end at your doorstep; green transportation means can greatly reduce your energy expenditures and carbon emissions from your daily routine.

### 16. Buy a High-efficiency Car.

See the U.S. Department of Energy's list of most fuel efficient cars at <http://www.fueleconomy.gov/feg/best-worst.shtml>.



1800 Massachusetts Ave. NW  
Suite 300  
Washington, DC 20036  
202 828-7422 t  
202 828-5110 f  
[www.usgbc.org](http://www.usgbc.org)

## About the U.S. Green Building Council and LEED® for Homes

*The U.S. Green Building Council (USGBC) is the nation's foremost coalition of leaders from every sector of the building industry working to promote buildings that are environmentally responsible, profitable and healthy places to live and work. With the help of a cadre of national experts and experienced green homebuilders, USGBC has developed LEED for Homes as a voluntary initiative to promote the transformation of the mainstream home building industry towards more sustainable practices. It provides a much-needed nationally applicable tool for homebuilders and other professionals in the residential industry for building environmentally sound, healthy, and resource-efficient places to live. For more information about LEED for Homes, visit the USGBC Web site at [www.usgbc.org/leed/homes](http://www.usgbc.org/leed/homes).*