

## 2011 Historic Preservation Award Winner 501 Burton Avenue, Highland Park, IL

### What makes this house Green?

There are many factors to be considered when determining how green a home really is. Some of the most reliable metrics have been defined by the US Green Building Councils LEED rating system and the US DOE Energy Star Program. Both examine energy consumption, indoor environmental quality, water use reduction and encourage the use of sustainable building products. The LEED rating system goes a few steps further by addressing issues that contribute to lowering your carbon footprint such as building site location, protection during development and the use of indigenous and draught tolerant plantings.

In the case of this home, we have followed the USGBC's checklist in designing and building the house. The architect, Michael Kollman is one of three LEED AP-Home specialists currently accredited in the State of Illinois. He offers the following description of the sustainable features of this house:



#### BEFORE

**LOCATION AND LINKAGES:** The home is located on a previously developed infill lot within existing city infrastructure and is close to extensive community resources as well as pedestrian and mass transit options.

**SITE CONSIDERATIONS:** Minimal disturbance was created during construction and plantings have been selected to reduce overall irrigation demands. Pervious patio and walk areas aid in water management and conservation.

**MATERIALS AND RESOURCES:** In deciding to "ReGreen" this historic 1926 Sears home, we have made a conscious effort to preserve resources and re-use as much of the original structure as possible. We were able to reclaim approximately 75% of the original home and enhance it to bring the entire house into the 21<sup>st</sup> century. The result is a home that exceeds today's building standards with a nod to the past.

#### EFFICIENCY AND INDOOR ENVIRONMENTAL QUALITY:

The home exceeds today's building standards for insulation levels and overall energy efficiency. The walls are insulated to an average R-21 and the roof R-50. Windows are Energy Star certified and the home energy use model indicates that it will consume 15-20% less energy than code requires.



#### AFTER

Interior finishes have been selected from environmentally preferable products as rated by the USGBC and locally produced if possible. Kitchen cabinetry has been manufactured and is certified in accordance with Environmental Stewardship Program (ESP) standards. The HVAC components are high efficiency and a digital control system will allow the homeowner to program the system to take advantage of passive heating and cooling techniques. Lighting and low-voltage power, data and media systems have been integrated into the digital control system that acts as the brain and central nervous system for the home.

**THE TRIPLE BOTTOM LINE:** This home was designed and built to consider the environmental, economic and social implications of living in today's world. The fact that we were able to save the existing home is considered by many to be the ultimate form of recycling. The fact that this home will require 15-20% less energy than a similar new home to live in makes economic sense. And most of all, if you believe in idea of **sustainable living** defined as meeting the needs of the present without compromising the ability of future generations to meet their needs, and then this home may be right for you.