

# High Performance Builder Spotlight

## Ideal Homes

Oklahoma City, Oklahoma



### Stumbling into Excellence

Since 1990, Ideal Homes has worked hard to position itself as the premier green builder in Oklahoma. “I wish I could tell you it was a conscious choice we made,” chuckles Vernon McKown, the co-owner and vice president of Ideal Homes, “But we got into energy-efficient homebuilding purely by accident.”

“ Access to a Building America Team helps us make logical, thoughtful decisions about our purchases and building plans. ”

VERNON MCKOWN - IDEAL HOMES

Ideal Homes found a deal on efficient air conditioners and used the efficiency savings as a selling point. It worked so well that they decided to look into other ways to save energy. By adopting ENERGY STAR and Building America standards, Ideal Homes quickly became Oklahoma’s largest homebuilder. Their dedication to healthy, energy-efficient building practices has won several accolades and awards, most recently the 2007 “America’s Best Builder” award from *Builder Magazine* and the National Association of Home Builders (NAHB) and the 2006 Energy Star for Homes Outstanding Achievement Award.

### Standard Features and Beyond

Ideal Homes builds a variety of homes, though about half of their buyers are first-time home owners. No matter what price or style is offered, energy saving technologies are included in all. Standard homes have insulating sheathing, air sealing at connection points, low-e windows, 14 SEER cooling systems, 90+% AFUE furnaces and more. The techniques used have helped Ideal Homes achieve energy savings 50% higher than other houses built in similar markets.

### The Whole Building Approach

By working with Building Science Consortium (BSC), a Building America team lead, Ideal Homes has developed building practices that include mastic sealed ducts, R-30 blown cellulose in the ceiling, and careful attention to areas where air leakage can occur. Recently they have started using R8 duct insulation instead of R6. With a tightly sealed house, Ideal Homes can offer buyers lower heating and cooling bills, as well as a healthier environment.

McKown notes that Ideal Homes takes a whole building approach to constructing solid, affordable, energy-efficient homes.

### Training, Teaching & Outreach

Ideal Homes constantly tries to learn new techniques and methods they may apply to their homebuilding repertoire. When a new technology

### BUILDER PROFILE

Ideal Homes

[www.ideal-homes.com](http://www.ideal-homes.com)

Founded: 1989

Employees: Approximately 95

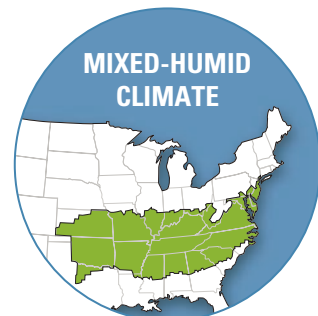
Development: Widespread, in Oklahoma

Square footage: 1,277 to 2,325 sq.ft.

Awards: 2007 America’s Best Builder Award; 2006 Energy Star for Homes Outstanding Achievement Award; 2006 Gold National Housing Quality Award and more.

For a complete list, please see [www.ideal-homes.com/flexpage.aspx?FlexPageId=4](http://www.ideal-homes.com/flexpage.aspx?FlexPageId=4)

This builder is described in Building America’s Mixed-Humid Best Practices.



U.S. Department of Energy  
**Energy Efficiency and Renewable Energy**

Bringing you a prosperous future where energy is clean, abundant, reliable, and affordable



This onsite metering device shows future homeowners why Ideal Homes decided to switch from incandescent to fluorescent lighting – the savings are obvious!

## KEY FEATURES

R-30 blown-in cellulose at the ceiling and R-19 for walls

R-15 +R-3 insulating sheathing

Low-e spectrally selective windows

Fresh air ventilation tied to furnace air distribution

90% AFUE gas furnace

14 SEER air conditioner

Sealed ducts in vented attic with R-8 insulation

ENERGY STAR Appliances

appears on the market, they first contact BSC to find out more. Recently they decided to look into building carbon neutral homes by 2030—BSC was able to send them a PowerPoint presentation to review, and guided them to other pertinent information.

## The Bottom Line

In many instances, Ideal Homes would not have tried a new technique unless suggested by BSC.

Sometimes these new techniques become standard, but without the expert guidance of BSC, Ideal Homes might have missed a great opportunity to enhance their expertise.

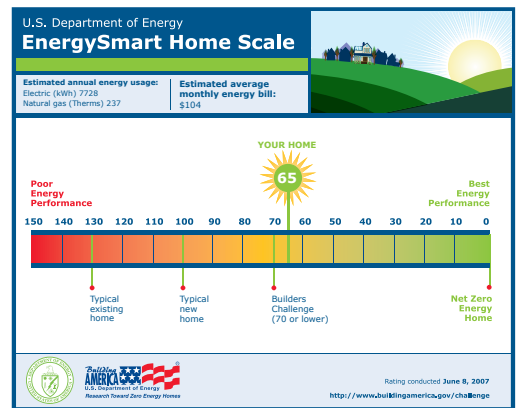
“Access to a Building America Team helps us make logical, thoughtful decisions about our purchases and building plans,” says Vernon McKown. “Where do you go when you don’t have a building scientist on your staff to answer your technical questions? We go to BSC; they are always willing to give us solid guidance.”

## U.S. Department of Energy Builders Challenge

DOE has posed a challenge to the homebuilding industry—to build **220,000 high performance homes by 2012**. Homes that qualify for this Builders Challenge must meet a 70 or better on the EnergySmart Home Scale (E-Scale). The E-scale allows homebuyers to understand—at a glance—how the energy performance of a particular home compares with others. Through the Builders Challenge, participating homebuilders will have an easy way to differentiate their best energy-performing homes from other products in the marketplace, and to make the benefits clear to buyers.

The figure to the right shows an E-Scale example. The E-scale is based on the well-established Home Energy Rating System (HERS) index, developed by the Residential Energy Services Network. To learn more about the index and HERS Raters visit [www.natresnet.org](http://www.natresnet.org).

To learn more about the Builders Challenge and find tools to help market your homes, visit [www.buildingamerica.gov/challenge](http://www.buildingamerica.gov/challenge).



For more information visit [www.buildingamerica.gov](http://www.buildingamerica.gov). The website contains expanded case studies, technical reports, and best practices descriptions.

## The Building America Program

Building America is a private/public partnership sponsored by DOE that conducts systems research to improve overall housing performance, increase housing durability and comfort, reduce energy use, and increase energy security for America’s homeowners. Building America teams construct test houses and community-scale projects that incorporate systems innovations. The teams design houses from the ground up, considering the interaction between the site, building envelope, mechanical systems, and other factors, and recognizing that features of one component in the house can greatly affect others. More than 40,000 energy-efficient houses have been built by the seven teams to date.