

January - February 2004

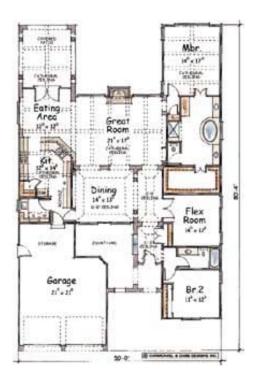
## NextGen 04: The Evolution Of The American Home



Modular technology is contributing to the "Evolution of the American Home," the theme for the 2004 NextGen Demonstration Home. This 2,400 sq.ft. home is on display outside the Las Vegas Convention Center for nearly the entire month of January, including during the International Builders Show, which runs Jan. 19<sup>th</sup>-22<sup>nd</sup>.

In addition to showcasing what can be accomplished within a factory setting, this home spotlights the evolution of building science, safety and technology--three amenities that never go out of style.

Taken together, they can offer builders a competitive edge in a very tough marketplace, says Paul Barnett, president of iShow, the organizer behind this event.



"Builders are naturally very skeptical of many new products because they equate it with increased cost. Home building remains one of the most competitive businesses there is. There are many products that are priced out of reach of the average consumer when they are first introduced. Our goal is to show that a home can incorporate the most advanced technology as well as the latest in safety and energy efficiency and still be affordable to most Americans."

## **Innovative Design**

A thoughtful design is at the heart of the home, which was created by Design Basics (Omaha, NE), a nationwide provider of custom design services. The two-story home incorporates a versatile design that allows for a wide range of

upgrades to appeal to buyers of greater means or to support the needs of growing families. It also features indoor energy efficient design and appliances, air quality protection, water conservation principles, universal design and the use of recycled materials.

"There is a strong emphasis on affordability," says Dave Engel with PATH or the Partnership for Advancing Technology in Housing, a platinum sponsor of the show home. "We're excited about demonstrating how builders can use technology to achieve high quality and energy efficiency in a home that a schoolteacher or firefighter could hope to own."



All-American Homes, the largest modular producer in the U.S., constructed the home at its Milliken, CO, facility. "They actually have three lines at that facility, with the third for creating special projects or luxury homes. So this was a good fit for us," says Mark McLendon, special project engineer for All American, which is a division of the publicly traded Coachmen Industries.

All American

typically accommodates custom designs. However, this project did employ some unusual materials, McLendon says. These included:

**Spray Insulation**—This spray foam resists mold better than fiberglass and carries a higher insulating value. And unlike fiberglass, it fills all framing cavities. "We had never used it before



in a factory assembly process," McLendon says. "But the Icynene people came forward with a lot of assistance. It's really energy efficient product. We've got some preliminary reports back that the home will use 37% less energy to heat and cool. We may use Icynene for some upcoming motel projects."

**Radiant Barrier Roof Sheathing**—This product reflects radiant heat from the sun back to the outside, reducing the load on the air conditioner.

**High Velocity HVAC**—The Unico system's small-diameter ducts fit easily within the home's conditioned space, which reduces heating and cooling losses. "It's the first time we've used that system and Unico has really come through," McLendon says.

**Automatic Humidification/Dehumidification**—Sensors in the home's fresh air intake tell this appliance how much moisture needs to be added to or taken from the air.

**Advanced Air Cleaning**—An electrostatic air cleaner installed near the air handler, and UV germicidal lamps placed over the air conditioner's evaporator coil, will keep healthy indoor free of germs and other particulates.

**Advanced Plumbing**—Low-flow plumbing fixtures will reduce water use. Tankless water heaters will turn on only when you need hot water. And plumbing air admittance valves are one-way interior valves that equalize pressure in the drain system, so you don't need plumbing roof vents. That means less air leakage to the outside, and less of a chance of a leaky roof.

**ENERGY STAR® Rated**—The home is outfitted with a variety of ENERGY STAR rated products and appliances, including ENERGY STAR rated windows with Low-E glass from Milgard.

**Safety First**—In addition to affordability, safety will be an important feature in the home. The Institute for Business and Home Safety (IBHS) and the Freedom Seal Alliance are participating in the NextGen project. The home will be constructed to the new Freedom Seal of Approval standard, which delivers a stronger-safer result for the homeowner.

After IBS the NextGen04 home is being donated to Opportunity Village, Nevada's leading not-for-profit organization serving people with mental disabilities. "At noon on Jan. 22nd we will hand the keys to the house over to Opportunity Village," says Barnett.

Opportunity Village will sell this advanced home and use the proceeds to fund organization's numerous programs that benefit the mentally disabled. "Unsolicited gifts like this are few and far between," says Linda Smith, chief development officer of Opportunity Village. "We are honored to receive such a generous donation and look forward to being able to use the money to continue our good works throughout the Las Vegas community."