



## Is wood outdated for the building of new homes?

According to experts in the home building sector, building the envelope of a home with wood framing has become passé with most builders looking to adhere to the latest green building codes. With the increased demand to meet these energy requirements and rising fuel costs, builders are constantly looking to learn the latest advances in building technology to best take advantage of today's durable and energy-efficient materials.

"Improved practices and innovations in the construction industry today reflect the greening of building codes across North America," explained Keven Rector at NUDURA, a leading name in the insulated concrete forms technology (ICF) that is blazing the trail for today's focus on eco-friendly development.

"A huge step forward is to replace the traditional wood framing of your house with what we call ICFs, insulated concrete forms," said Rector. "Wood framing is outdated now. By building the envelope of your house with concrete instead of wood, the energy required to heat and cool it will be significantly reduced, a plus for the environment, and along with reduced energy bills, a plus for you."

## What are insulating concrete forms (ICFs)?

ICF construction consists of a concrete frame sandwiched between two layers of insulating material. This construction material is designed in such a way that it creates a strong thermal continuous insulated wall, ideal for a building of any type. Once the blocks are carefully stacked together, concrete is poured inside them and allowed to cure.

ICFs should be considered as an investment

With so many benefits, ICFs are more an investment than the mere cost of building materials. Since it is light and easy to handle and requires less manpower to build, the impact on construction time is greatly reduced. Compared to other building materials, it has a longer durability and is also moisture resistant due to the inorganic nature of the materials. Houses built using ICF have a proven resistance to earthquakes, tornados, fires and other natural hazards. In the long run, owners will witness 50 percent reduction of their energy bills.

## The benefits of ICFs compared to wood framed buildings

Although more expensive than the traditional wood frame, ICF block construction has a number of long-term benefits. ICF block construction is extremely sturdy, durable, and disaster-resistant, in addition to being highly energy efficient. It offers superior insulation as the thermal mass resistance of ICF walls are much higher than wood at a value rating of R-50 compared to R-20 with wood structures. As a result, it can regulate temperature more easily, making it more cost-effective and energy efficient compared to wood framed buildings.

## What the impact of ICFs are on the environment?

ICF construction has a wide range of environmental benefits. Apart from directly impacting and reducing the number of trees that are cut, ICFs reduces greenhouse emissions as the structure requires less energy to heat and cool. For residential buildings, ICF construction can offer operational energy savings compared to wood-frame homes in cold and warm climates. As such, heat is absorbed in the concrete walls during the day and is diffused around the house, especially during cold winter nights.

## There are multiple reasons why homeowners are choosing ICFs

ICFs give homeowners the opportunity to be more environmentally responsible. Apart from energy efficiency, ICF construction allows for reduced sound transmission and is highly resistant to storms and high wind. People can also enjoy larger windows and longer floor spans and unique architectural elements as per their needs and design requirements. In fact, these advantages account for greater comfort and consequently, healthier indoor environments. More information is available at [www.nudura.com](http://www.nudura.com).