



## 5 reasons why concrete is replacing wood for home construction

There is a growing movement in the construction industry towards the use of concrete instead of wood when building a new homes' envelope. An advanced system using reinforced concrete or insulated concrete forms (ICFs) are increasingly being chosen by builders and architects alike for their numerous advantages over wood frame houses. Apart from offering superior comfort and soundproofing, they are acclaimed for their solidity, durability, resistance to natural disasters, and energy efficiency.

### Why homes built using ICFs are superior to wood frame houses

Composed of insulated reinforced concrete, ICFs act as the acoustic and thermal insulation for walls. They can also be used for spreading electrical wiring and plumbing pipes. Sidings such as bricks and boards can also be used on the outside and inside respectively.

The following are the five top reasons why houses made of these ultra-durable concrete walls represent a superior alternative and a good investment for families:

### ICF construction is energy efficient

Houses made with ICFs require approximately 44% less energy for heating and 32% less energy for cooling when compared to traditional wood frame houses. In fact, ICF walls have the capacity of working as thermal insulation and prevent drafts as well as sudden changes in temperature from thermal bridging. As a result, families living in

these homes can benefit from up to 60 per cent reductions in heating and cooling bills and more comfortable, temperature-controlled environments.

## ICF construction can withstand disasters

According to Keven Rector at NUDURA, a leading name in building with insulated concrete forms, houses constructed with ICFs have proven to be extremely durable, withstanding severe weather conditions such as earthquakes, hurricanes, and tornadoes. Experiments carried out by Texas Tech University revealed that ICF built homes can tolerate powerful winds (up to 402 km per hour (250 mph) and flying debris, keeping people safe inside. This is not the case of wood frame houses ravaged again and again by multiple natural disasters. Many insurance companies even offer lower premiums on ICF constructions.

## Concrete houses are durable and provide cleaner indoor air

Since ICF built houses are not made of biodegradable material, they do not favor the propagation of insects, mold, and mildew and none of the related toxicity. The foam insulation equally makes the walls immune to moisture. Consequently, ICFs undergo practically no degradation in the home's lifetime. By restraining drafts of air, an ICF construction prevents airborne contaminants leading to cleaner indoor air with radically fewer allergens and toxins

## ICF soundproofs the house

An ICF construction also has the capacity of dramatically muting outside noise. An excellent insulator, ICF walls offer an unparalleled level of soundproofing as the blend of insulation and concrete creates a perfect sound barrier. Conventional wood frame houses, on the other hand, allow six times more noise.

## Concrete houses are fire resistant

It has been noted that houses made of ICFs can resist fire for as long as 4 hours. In case of fire, the smoke is less dense and less toxic than that emanating from a burning wood framed house. The spreading of fire is also considerably reduced in concrete houses. More information is available at [www.nudura.com](http://www.nudura.com).