## **WHAT ARE ICFS?**

BuildBlock Insulating Concrete Forms (ICFs) are hollow foam blocks that are stacked into the shape of the exterior and load bearing walls of a home, reinforced with steel rebar, and then filled with concrete.

The ICFs stay in place and provide superior insulation and noise reduction while keeping your family safe from disaster. BuildBlock ICF technology combines the proven strength and endurance of concrete and steel with the superior insulating properties of expanded polystyrene. Your home will be more energy efficient, comfortable, durable, and safer than a conventional home.



BuildBlock Insulating Concrete Forms help create a seamless solid concrete wall that is 10 times stronger than wood framed structures.



#### TORNADO & HURRICANE RESISTANT

A study conducted by Texas Tech University proves that walls built with Insulating Concrete Forms (ICFs) withstand the damage and projectiles launched by tornado and hurricane strength winds. A safe room is the perfect complement to an ICF home.



#### **EARTHQUAKE RESISTANT**

Built according to good building practices, concrete homes can be among the safest and most durable types of structures in an earthquake.



#### **FIRE RESISTANT**

In fire wall tests, ICFs stood exposure to intense flame without structural failure longer than did common frame walls. The extremely low flame spread and smoke development make ICF walls safer from the hazards of fire.

#### ENERGY COST SAVINGS COMPARISON



# Yearly Energy Costs: \$3,656.25 (\$.91 sq.ft./year) ENERGY EFFICIENT ATTRIBUTES:

- Visqueen vapor barrier behind sheetrock.
- Home orientation taking advantage of winter & summer solar heat gains.
- Fully foam sealed wall plates, windows and doors.
- The entire home was also covered in 1x8 decking, wrapped in tar paper and 1" EPS sheets were added for additional insulation.
- It also utilized a dual heat & air system with a heat pump and weather-clad double pane vinyl windows. Another energy saving feature was the absence of windows on the west side of the home.

IN COMPARISON TO



Oklahoma City, OK Square Footage: 5,000 (11 fr Ceilings Throughout)
Construction Method: Insulating Concrete Forms

# Yearly Energy Costs: \$1,886.63 (\$.38 sq.ft./year) ENERGY EFFICIENT ATTRIBUTES:

- BuildBlock Insulating Concrete Forms.
- Icynene insulation to seal the attic envelope.
- Dual speed geothermal system, dual heat & air system with a heat pump.
- Low-E Argon, double pane vinyl windows.

**ANNUAL SAVINGS: \$1,769.62 (58.3% PSF)** 

LOCAL REPRESENTATIVE:

ITEM# BBM-2101 | REV. 6.15

## **CHOOSE INSULATING CONCRETE FORMS (ICFs)**



Beautiful, Safe, and Comfortable Dream Homes



ADVANCED WALL, FLOOR, AND ROOF SYSTEMS



HE IS LIKE A MAN BUILDING A HOUSE, WHO DIGS AND GOES DEEP, AND LAY'S THE FOUNDATION ON THE ROCK; AND WHEN A FLC COMES, THE TORRENT BURSTS UPON THAT HOUSE, BUT IS UNABLE TO SHAKE IT, BECAUSE IT IS SECURELY BUILT. - LUKE 6:48

## WHAT ELSE CAN YOUR SAFE ROOM DO?

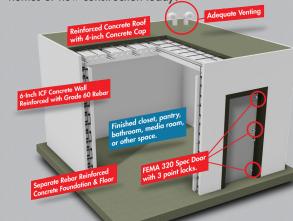




Building a safe room doesn't mean building an ugly bunker. Your ICF safe room can be any room you want and you can use it as a part of your home each day. In addition to ICF exterior walls, BuildBlock also provides the ultimate floor and roof system to create an envelope of protection against natural disasters and turn the entire structure into a safe haven with BuildDeck.

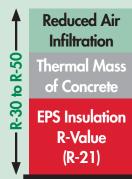
If you live in an existing structure and are looking for the added protection. BuildBlock and BuildDeck provide the perfect solution. Extensive testing, by Texas Tech University and other wind engineering research institutes, has shown that walls and ceilings constructed with ICFs will withstand the impact of tornadoes and hurricanes.

BuildBlock Safe Rooms are a completely sealed, temperature controlled, comfortable, dry, and safe place to protect your family during a disaster. Add an ICF safe room to existing homes or new construction today!



#### **ENERGY EFFICIENCY & SAVINGS**

At a time when energy costs are soaring, many consumers are deciding it makes more sense to spend money on safer, longer lasting, and more energy efficient structures. BuildBlock Insulating Concrete Forms are ideal for creating one of the essential elements of an energy efficient structure: a well-insulated and sealed building envelope. Structures built with BuildBlock Insulating Concrete Forms and the proper complement of windows, doors, and HVAC systems, generally save 30-70 percent on their utility costs.



The Total Effective R-Value performance of BuildBlock ICFs consists of three factors: the R-Value of the expanded polystyrene, the thermal mass of the concrete, and the enormous reduction in air leakage (air infiltration).

With the combined performance of these three factors, ICF walls actually perform as high as

R-50+ in some areas of the country. This energy efficiency directly contributes to LEED Certification and may qualify you for tax credits and deductions as well as an Energy Efficient Mortgage.

- Stable room temperatures.
- No hot spots, no cold drafts.
- Greatly reduced pollen, allergens, and dust; 75% less outside air infiltrates a BuildBlock ICF home.
- Noticeably more quiet.
- 80% of ICF home owners mention comfort as the best benefit compared to 22% of wood frame home owners.



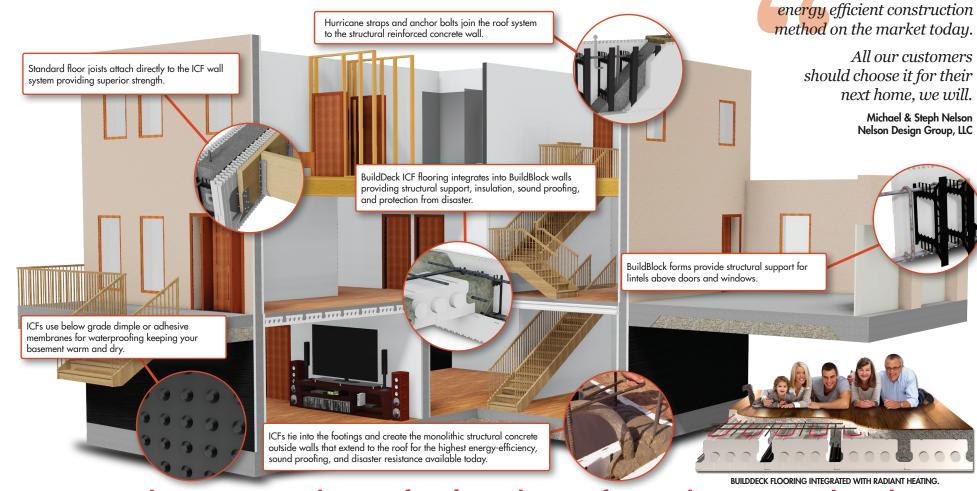
Wood frame walls (left) are warm and lose heat, ICF walls (right) remain neutral losing little to no heat

## **EXTREME ENERGY EFFICIENCY**

BuildBlock ICFs provide energy efficiency that meets tomorrows building codes today. The images above shows an ICF home heat loss versus a traditional wood frame home. Choose ICF and save money for decades.

Traditional wood-frame construction can't compare to the safety, permanence, and energy efficiency of walls built with Insulating Concrete Forms.

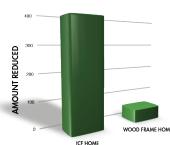
# BUILDING YOUR ICF DREAM HOME



# A concrete home surrounds your family in the comfort and protection they deserve.

## QUIET AND COMFORTABLE

NOISE REDUCTION



BuildBlock Insulating
Concrete Form structures
provide unparalleled
sound mitigation and true
protection from outside
noise. ICF walls have
an average STC rating
of 50 which means in
sound transmission tests,
BuildBlock ICF walls allow
less than one-third as much
sound to pass through than
regular wood-frame walls.

#### **AFFORDABLE**

BuildBlock ICF homes are comparable in cost to wood framed homes, however you will see your return on investment month-after-month due to the reduction in utility bills and the reduction in repair costs.

Many are taking advantage of reduced insurance rates and even tax rebates in some areas for those who opt to build with ICFs.

✓ DESIGN FREEDOM

ICFs are the safest and most

Virtually any home plan can be adapted for BuildBlock ICFs. Exterior walls can be finished with brick, masonry, stone, stucco or siding.

Because of the innate flexibility of the foam material, you can have unique arches, angles, curves and columns as part of your design.