

## 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



Oklahoma City, OK Square Footage: 4,000 (8 and 9 ft Ceilings)  
Construction Method: Traditional Wood Construction (2x6 framing)

**Yearly Energy Costs: \$3,656.25 (\$0.91 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 ft Ceilings Throughout)  
Construction Method: Insulating Concrete Forms

**Yearly Energy Costs: \$1,886.63 (\$0.38 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# 68M-2101 | REV. 1.19

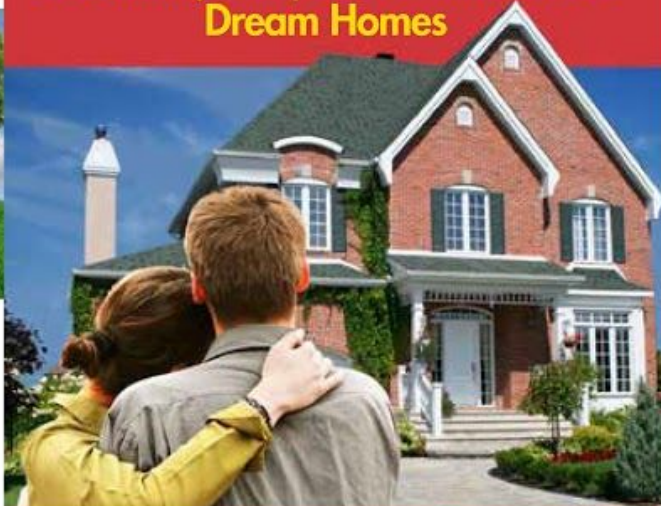
**Wellard Constructors**  
Salmon, ID 83467  
208-756-7117

## CHOOSE INSULATING CONCRETE FORMS (ICFs)

# Building Your ICF Dream Home



## 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 LAYS THE FOUNDATION ON THE ROCK; AND WHEN A FLOOD 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?



## ICF SAFE ROOMS

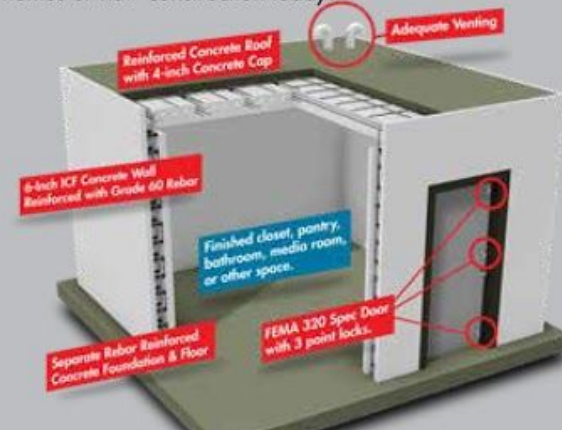


Your ICF Safe Rooms can be any room in your home: master bathroom, bedroom, closet, pantry, media room and more.

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 insulation and protection from natural disasters. Turn your entire home into a safe haven with BuildDeck.

If you live in an existing home and are looking to add 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

Energy efficiency requirements continue to increase and the price of traditional construction materials and energy costs are soaring. You are deciding if it makes more sense to spend money on safer, longer lasting, and more energy efficient structures or build with traditional construction. BuildBlock Insulating Concrete Forms create the best insulated and air tight building envelope; the most important part of an energy-efficient and resilient structure.

Homes built with BuildBlock ICFs are so efficient that when combined with efficient windows, doors, and HVAC systems, homeowners generally **save 30-70% on their utility costs.**

↑ **Reduced Air Infiltration**  
**Thermal Mass of Concrete**  
 ↓ **EPS Insulation R-Value (R-21)**

BuildBlock ICF R-Value performance 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).

The insulated thermal mass of the concrete prevents outside temperatures from influencing the internal temperature of the home. This means your HVAC doesn't have to work as hard.

Combined these three factors help ICF walls perform **as high as R-50+** in some areas of the country (<http://buildblock.com/performance>). This energy efficiency directly contributes to **LEED Certification** and may qualify you for **tax credits** and deductions.

• Stable room temperatures; no hot spots, no cold drafts.  
 • 75% less outside air infiltrates a BuildBlock ICF home; greatly reducing pollen, allergens, and dust.  
 • 80% of ICF home owners mention comfort as the best benefit compared to 22% of wood frame home owners.

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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 tomorrow's building codes today. The images above shows an ICF home heat loss versus a traditional wood frame home. Traditional wood-frame construction can't compare to the safety, permanence, and energy efficiency of walls built with Insulating Concrete Forms.

**CHOOSE ICF AND SAVE MONEY FOREVER.**

# BUILDING YOUR ICF DREAM HOME

*ICFs are the safest and most energy efficient construction method on the market today.*

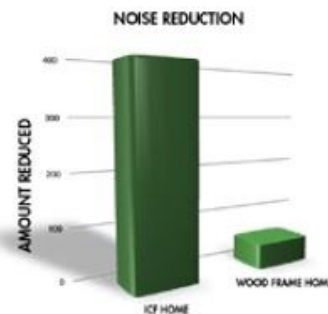
*All our customers should choose it for their next home, we will.*

Michael & Steph Nelson  
 Nelson Design Group, LLC



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

### QUIET AND COMFORTABLE



BuildBlock ICF 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, and you will see your return on investment month-after-month through reduced utility bills, maintenance, and upkeep.

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

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 ICFs, you can have unique arches, angles, curves and columns as part of your design. If you can dream it, you can build it.