



## Insulated Concrete Forms Gaining Popularity in Residential Construction

Recent Gulf Coast hurricane seasons added new construction terms to the public's lexicon. Coastal communities learned how well "Insulated Concrete Forms" worked.

Homes built with these reinforced walls performed extraordinarily well in the last two very active tropical storm seasons.

But ICF's reputation is spreading beyond the coast. Homeowners and builders throughout Alabama are enjoying the benefits of ICF.

As president of Force Five Walls, Inc, Rodney Hubble is an ICF distributor and subcontract installer.

He explains ICF to homeowners by equating the forms to concrete-filled Styrofoam ice chests. "It's the same concept as in poured con-

crete. We're forming and placing concrete into a wall and form that's insulation itself," Hubble said.

ICF concrete forms are made of foam insulation and are left in place for construction. The result is a continuous concrete structure with extremely high structural integrity.

That integrity makes ICF homes particularly popular in areas susceptible to hurricanes, tornadoes or straight-line winds.

Hubble said ICF homes along the Alabama coast endured the sustained winds of 2004's Hurricane Ivan without incident. However, ICF is used in residential construction throughout Alabama, even in areas at less risk for storm damage.

Homeowners are turning to ICF for better pest control, lower util-

ity bills and better fire protection that lowers insurance costs. They learn about the product from builders or from their own research.

Greg Graham is owner of Graham Polysteel in Sylvania, Alabama. His firm was enlisted to provide walls for the 6,000-plus square foot home pictured above.

Owners Ken and Brenda Haynes of Madison, Alabama read about the advantages of ICF on the polysteel.com website.

Ken Haynes said his builder was willing to learn about ICF construction. The home includes a full basement, main level and second floor. The exterior is full brick, with metal shingles.

"I would not build another stick house," said Haynes. "My house

is insect-free and virtually sound proof. My electric bill averages \$250 a month and we keep the house at 70 degrees, 24/7, all year long," Haynes says.

Haynes says his electric bill covers three refrigerators, three hot water heaters and constant use of the washer and dryer.

"I also have a ton of other electrical equipment, including welders, irrigation pumps, fountains, etc. So I figure I'm saving just over \$125 a month," he says.

In addition to the insulation value and power savings, ICF is also valued for its fire safety. Each wall in an ICF home works as a firewall, with a fire retardant built into the foam forms. Thus insurance risks are lower.

Hubble cites insurance rates on a Jasper condominium complex as an example of the savings. The 20-unit, four-story condo was

built with ICF. Without these concrete form walls, annual insurance would cost the owner \$152,000 a year. With the forms, annual insurance rates are only \$27,000.

Another benefit to ICF construction that the Haynes have enjoyed is its noise reduction. Since the structure absorbs sound, loud noises are muffled or eliminated completely.

One owner asked Hubble for ICF components, saying he was looking for the benefits of an ultra-quiet home. "The customer said 'If a missile hits outside, I don't want to hear it inside'," Hubble says.

One reason ICF is such a well-kept secret is that observers don't know an ICF home is made of concrete unless they see it under construction. Any exterior, from wood to stone to brick to stucco, can be used. The benefits, however, are immediately apparent to residents.

Another ICF advantage is its eco-

friendly qualities. "Polysteel does not contain chlorofluoro-carbons, HCFC, formaldehyde, asbestos or fiberglass," Graham said.

"Also, PolySteel directly reduces the lumber used in construction. Working in partnership with concrete, one of earth's most abundant materials, PolySteel Forms are environmentally superior in every way."

Hubble says ICF construction is particularly popular in high-end homes of 10,000 square feet or more.

"Those who truly research construction want this type of product," Hubble says. High-end commercial contractors, who like what they see in ICF commercial buildings, also turn to the product when building their personal homes.

Hubble has worked primarily with ICF construction for six years. His firm has stayed busy, with no need to advertise. His marketing strategy? "I just answer the phone,"

