‘Value and Service’ Prevents ‘Dump and Run’

by Michael Trunko

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Insulating Concrete Forming (ICF) systems are a fairly new building technology, yet they already make up five percent of all new residential construction and are growing by 25 percent annually. The technology is not only being used for foundations, but also exterior above-grade walls, sound walls, firewalls, retaining walls and radius walls in residential, commercial and industrial construction.

Reinforced concrete walls are up to 8.5 times stronger than wood-framed walls, and are far more resistant to

earthquakes, tornadoes, hurricanes, rot, mold, mildew, termites and ants. They also make better sound barriers, with a 50 percent reduction in noise transfer when compared to most framed walls.

Due to the solid concrete, an ICF structure is far more likely to remain standing through a fire than structures built with wood. Quad-Lock Building Systems’ ICF walls have been tested and shown to be an effective 4-hour firewall. In the same tests wood-frame walls typically collapsed in one hour or less.

Quad-Lock Building Systems Ltd., established in 1994, is the only ISO 9001:2000 certified ICF manufacturer. The lightweight, stay-in-place ICF system was developed to reduce the cost and increase the versatility of forming cast-in-place concrete walls, floors and roofs. The company’s distribution network covers North and Central America, Europe and Asia.

“Since many contractors and builders are unfamiliar with ICF technology, they are primarily concerned about price,” states Wendy Davidoff, Marketing Manager of Quad-Lock, based in British Columbia. “When value and service enter the equation, however, ICF construction is by far the most cost-effective building system on the market; even when compared to wood frame construction. This is especially true when looking at the long-term costs of operations and maintenance of a structure.”

Construction costs of ICF buildings are competitive with wood-frame, concrete block and other wall systems. As a result, the technology is taking market share from traditional building methods because it offers higher comfort, energy efficiency and safety ratings, as well as higher property and resale value.

The higher material costs of ICF systems are offset by:

- Reduced labor costs. An ICF system can combine wall forming, insulation, vapor barrier, studding and sheathing into one step. Since several steps are eliminated, experienced crews can build ICF structures in significantly less time than wood-frame construction.
- Downsizing of heating and cooling equipment. ICF walls are better insulated and more energy efficient than wood frame walls. “We offer a true R-40, the highest in the ICF industry. R-values of 22 and 32 are also available,” says Davidoff. “The concrete’s thermal mass keeps inside temperatures more even, and can reduce heating and cooling costs by as much as 70 percent.”

In addition, builders wishing to comply with “Green Building” standards, such as LEED (Leadership in Energy and Environmental Design), can do so. Some ICF systems with concrete contribute up to 69 percent of LEED points from high-energy efficiency, use of recycled materials, local production of materials, low wood consumption, and highly durable buildings.

Dump and Run

“When choosing an ICF system, like most other building materials, price alone should not be the deciding factor,” comments Hubert Max Kustermann, CEO of Quad-Lock. “This is especially true in the ICF industry. Of course, it is important to get the lowest price possible for the agreed upon product. But customer service creates the value.”

Customer service should begin with the first contact and continue through to the project’s completion. This includes timely, accurate estimates; engineering assistance; pre-construction meetings; on-time, complete shipments; technical support; and local inventory, representation and training.

“Builders who realize the importance of value-added services along with product price, do not have to worry about material being delivered to their jobsite without any support or training,” states Davidoff. “Something we see happening a lot, especially now in a tighter market, is what we call ‘dump and run’.”

Dump and run is when contractors order product and it is delivered to the jobsite, but there is no training and no customer support. With an ICF system, manufacturers should not leave new-to-ICF builders to try and install it on their own.

“We regularly get telephone calls from contractors who are building with a competitor’s product but have questions to which they need answers, such as how to secure something or handle a certain corner activity. So, we help them,” says Douglas Bennion, Technical and Training Manager of Quad-Lock.

Builders need to consider the on-going partnership – someone to help with technical support, training and on-site assistance. Local representatives must be equipped to answer questions, prepare detailed estimates and provide inventory. The ICF manufacturer’s headquarters should complement its field offices with engineering and training support.

Without training, support and local inventory, a project can become very time-consuming and costly from a mistakes perspective. Builders should only deal with an ICF provider who offers these components, in addition to the actual building system.

"Anyone can eventually figure out a building system, but the longer it takes the more it costs you in labor, wasted material and mistakes," Davidoff remarks. "And, time is money."

Training Seminars

Building with an ICF system is not difficult to learn. Basic building skills can easily be transferred to the technology. Experience in carpentry, masonry, and concrete forming and placement are particularly helpful. However, it is strongly recommended that builders participate in an initial training seminar to learn basic installation skills.

"Our one-day training seminars include an in-depth review of installation procedures, accessories, and technical requirements," explains Bennion. "Led by a qualified professional, we use an effective combination of video presentation, discussion, and hands-on activities to qualify installer candidates and other participants."

During the first four months of each year, Quad-Lock holds free training seminars in conjunction

with their dealers at numerous locations throughout North America. The dealers host the seminars but qualified trainers do the training.

Bennion indicates that, "we expect to train upwards of 1,500 would-be installers in early 2007." Jobsite training is also available for newer ICF builders, with the trainers going onsite to work with the builder's crew.

The seminars are set-up in a "two-step qualification process" to educate installers on the latest techniques being used.

The first step, or "pre-qualification", consists of a 6½-hour training course that offers a mix of classroom and hands-on practices. It includes viewing an installation video, which the participants get to keep. Seminar participants also receive detailed instructional and technical materials, product manual, installation guide and technical bulletins. Upon completing the course, a written test must be passed to become a "pre-qualified" installer to work with the building system.

The second step is an "assessment of the installer's abilities" by a qualified representative on an actual jobsite. An overall review of the job is performed. After a successful evaluation, the installer is endorsed as a "Qualified Installer" and receives building leads, technical support, etc.

A company's technical support service should provide builders with all the assistance necessary for every aspect of selling, estimating and installing their ICF system. This can include contractor training seminars, job-site training, and support materials, such as a product manual (including CAD drawings), technical and promotional literature, pocket installation guide and computerized estimating program.

"By having an international distribution network, ICF dealers can provide local inventory as well as local support," says Davidoff. "Obviously, the dealers become very familiar with the product. Technical assistance is also offered via phone, fax, email, and in some cases on-site."

Not All Systems Are The Same

While ICF systems can provide exceptional value and benefits to builders, not all systems are the same. To get the most value and benefits, the system should use only standard parts, yet be highly versatile. To assure simplicity in construction and supply, no custom or special-ordered parts should be required.

"You should be able to build exactly what you want, how you want it and do it at the site," states Bennion. "You should not have to order special

corners, angles, brick ledges or other items. You should also be able to produce any desired wall thickness, without any thin/thick sections."

According to Bennion, the expanded polystyrene that makes up the ICF material needs to be cured for at least several weeks before use. Therefore, manufacturers should not ship their material until it has been properly cured, preferably in a warehouse. However, some companies ship their product within a couple days after production.

Worse yet, Bennion points out that when the improperly cured material is delivered to the jobsite there is often no support or training. Local representatives should be available and capable of offering field training and assistance to the end user.

"During my 25 years in the construction business, I've seen a lot of companies come and go," Bennion says. "The successful ones are those that offer a fair price for their services and have a quality product. The ones that try to sell on low price alone usually fall by the wayside."

Bennion adds that, "You should always strive to get the highest quality ICF system along with exceptional service at a fair price. Whether it is prompt return of phone calls, on-time shipments or technical support."

For more information about Quad-Lock Building Systems or ICF training seminars, call 888-711-5625 or visit www.quadlock.com. ■