More Money in Mind

Incentives for code-plus construction are on the rise

By Lisa Ann Thomson
prove to your customers and the government that your buildings are above average and you’ll not only gain a competitive edge but tax savings to boot. Continuing

energy concerns and rising insurance premiums are motivating more and more consumers to demand well built, economical structures, be they single-family homes or multi story buildings. Moreover, several industry and government programs have emerged to help you achieve stronger, more efficient structures that are certifiable.

More than ever before incentives for code-plus construction are on the rise. The U.S. and Canadian governments both offer lucrative incentive programs worth chasing for energy efficient construction. The United States recently enacted the Energy Policy Act of 2005 which provides tax credits to both consumers and builders if they exceed baseline energy efficiency. In Canada, grants are available to builders who can demonstrate that their buildings exceed the Model National Energy Code.

**CBIP**

When developers first envisioned the Muskoka Wharf project in Gravenhurst, Ontario, (see *Permanent Buildings & Foundations*, February 2006, pp 6-9), they foresaw a green community with energy efficiencies built-in, from the wall systems to the windows to the heating and cooling equipment. The project is now well underway, and their vision has not only won them points with eco-minded consumers and advocacy groups, but has also earned them government grants for energy efficient design.

"We received quite a bit of money in energy grants because we met the criteria," says Frank Bentley, president of Formtech International, who supplies insulating concrete forms (ICFs) for the development.

"The structures are developed in a way to be easy on the environment and to incorporate advanced techniques into the building systems themselves."

The money came from a Canadian government program called the Commercial Building Incentive Program (CBIP). The program was started in 1998 and is part of Canada's Project Green initiative. CBIP was created to encourage the design and construction of energy efficient commercial buildings. The encouragement comes in the form of up to $60,000 cash for buildings that can demonstrate at least 25 percent more energy efficiency than Canada's Model National Energy Code.

Application for the incentive is submitted with completed design drawings and energy simulations. If the application is approved, 80 percent of the award is given within a few months of approval so it can be used for construction. The final 20 percent is awarded upon project completion.

CBIP offers up to $1,000 of free design and simulation assistance. For larger or more involved projects a builder will need to hire a CBIP-experienced consultant to help him meet the program requirements. The program expires March 31, 2007.

**Energy Star**

You know the labels. They're on everything from water heaters to windows to washers and clothes dryers. But they can also be awarded to entire houses and buildings.

The Energy Star program is part of the U.S. Department of Energy and was begun in 1992 as a voluntary labeling program to promote more energy efficient and environmentally friendly products. The first to be
BRANDED EFFICIENCY: High energy costs and rising insurance premiums are motivating consumers to demand well built, energy efficient single-family homes and multi-story buildings. Moreover, several industry and government programs have emerged to certify and brand stronger, more efficient structures. Under these programs, when you tell consumers their new home has achieved the certified rating, they know you as its builder have met high standards to assure it is a quality structure. This precast concrete home was built by Dukane Precast, Naperville, Illinois.

labeled were computers and monitors, but the program has expanded to include a wide variety of products from household appliances to heating and cooling equipment.

In 1995 Energy Star introduced programs for entire buildings and homes. Builders can obtain requirements for their climate zone to earn an Energy Star label from Energy Star’s website. The completed project must be rated and passed by an accredited home energy rater to be dubbed an Energy Star building.

The program also invites builders to partner with Energy Star and take advantage of a network of builders with similar goals and challenges.

“Sometimes it’s even more valuable hearing from your peers about what’s worked and what’s not worked, particularly if they are in similar climate zones,” says Energy Star spokesperson Maria Vargas.

She adds that because Energy Star is a government program, there is little risk and several advantages to becoming involved.

“It is valuable for the EPA to do this because we’re not a builder,” Vargas says. “Our real goal is to have homes built as energy efficiently as possible. We’re unbiased. Builders can trust us because we are not out to sell them insulation. We don’t have a hidden agenda.”

And Energy Star has the advantage of branding. It’s a program your customers have heard of. So when you tell them their new home has achieved the Energy Star rating, you have said it all.

Fortified... For Safer Living
With a hurricane season like last year, it’s not hard to understand where this program came from. In late 2000, the Institute for Business & Home Safety (IBHS) introduced a program called Fortified... for safer living. Its purpose is to encourage disaster resistant building and to mitigate the cost of recovery after disasters.

“The goal of the program is to get people to demand and builders to build homes that better resist the forces of nature,” states the program’s website.

Fortified bills itself as a mechanism for introducing builders to recent techniques and technologies that improve the sustainability of a building but have not been incorporated into current building codes.

“Many builders in the United States recognize the need for code-plus construction,” says Chuck Vance, program manager for
The U.S. and Canadian governments both offer lucrative incentive programs worth chasing for energy efficient construction.

Fortified, "and we help them address the issues they face where they build."

On the program's website you can enter a zip code and receive detailed guidelines for mitigating disasters common to a specific area. Homes built to the criteria receive an official designation as "Fortified... for safer living" through an inspection by an independent IBIS-certified inspector trained to verify that the requirements are met.

You can anticipate it costing between 3 and 10 percent more to build to the Fortified guidelines. But Vance points out that there are a range of upgrades you can select from, which can help control costs.

"The program as a whole is cost effective," he insists. "The methods and materials already exist and are used everyday. A builder simply has to apply known techniques that engineers say are vital in helping protect a home from extreme weather."

LEED

Ask Mike Schwab, president of Commercial Block, in Salt Lake City, Utah, what he sees for the ICF industry in the next few years, and you'll find he's pretty bullish on the market. Ask him why he feels so, he spouts one acronym: LEED.

LEED stands for Leadership in Energy and Environmental Design and is a green building rating system developed by the U.S. Green Building Council (USGBC). The USGBC is a coalition of industry members with the express goal of promoting buildings that are environmentally responsible, profitable and healthy places to live and work. To help accomplish that, USGBC developed the LEED system for designing, constructing and certifying what the program dubs "the world's greenest and best buildings."

"ICFs, in my opinion, are going to be the front runner of LEED," says Schwab, pointing to the forms' in-built qualities that dovetail with LEED requirements.

LEED, which has also been licensed for use by the Canada Green Building Council and will soon be available in Canada as well, offers detailed checklists for a variety of commercial and residential building settings. LEED currently includes new construction, existing construction and commercial interiors, and guidelines are in development for core and shell, homes, and neighborhood development.

The rating system is based on points which you accumulate by incorporating green features—anything ranging from meeting minimum energy requirements to including an on-site renewable energy source. LEED also includes items such as water efficiency in landscaping, recycled construction materials and indoor air quality. By meeting requirements on the checklist, a building earns points and then is designated at one of four levels: certified, silver, gold, or platinum.

In addition to the certification system, LEED offers a full compliment of training workshops, professional accreditation, resource support and third-party certification of building performance.

It costs up to $650 to register a building with LEED, and you may incur higher upfront costs to include certain building features. But if you own the buildings, you'll reap the long-term benefits of improved building performance and reduced operating costs. If you sell the buildings, you can sell these benefits (which come with a certificate and plaque) to your customers while you carve out a niche as an energy efficient and environmentally aware builder.

FOR MORE INFORMATION:
Commercial Building Incentive Program (CBIP)
Buildings Division
Office of Energy Efficiency
Natural Resources Canada
580 Booth Street
C/O Observatory #3
Ottawa ON K1A 0E4
Toll free: (077) 360-5500
Local: (613) 992-3245
Fax: (613) 947-4121
www.eee.nrcan.gc.ca/newbuildings

Energy Star®
ENERGY STAR Programs Hotline
& Distribution (MS-62071)
1200 Pennsylvania Ave NW
Washington, DC 20460
888-STAR-YES
www.energystar.gov

Fortified... for safer living®
Institute for Business & Home Safety
4775 East Fowler Avenue
Tampa, FL 33617
Tel: (813) 206-3400
Fax: (813) 286-9960
info@ibs.org
www.ibs.org
Click on "For Your Home" and then click on "New Construction" for information about Fortified... for safer living.

Leadership in Energy and Environmental Design (LEED)
U.S. Green Building Council
1015 18th Street, NW, Suite 508
Washington, DC 20036
Tel: (202) 82-USGBC or 828-7477
Fax: (202) 828-5110
leedin@usgbc.org