

Massachusetts Stretches for Higher Home-Energy Scores

In July of 2009, the Commonwealth of Massachusetts enacted a complex piece of legislation called the Green Communities Act, or GCA. Although the act concerns itself largely with public utility policy, it also contains a number of provisions aimed specifically at builders. And as a key deadline approaches, builders in some Massachusetts communities are waiting somewhat uneasily for those provisions to take effect.

Waiting for the appendix. One element of the GCA is the Green Communities Program, under which municipalities that meet five separate criteria can become eligible for “Green Community” designation by the state. So far, about two dozen of the 351 municipalities in the commonwealth have enrolled.

As of July 1, 2010, builders in those Green Communities will be required to comply with Appendix 120 AA — commonly known as the “stretch code” — to the amended 7th edition of the Massachusetts building code, which is designed to be about 20 percent more energy-efficient than the base code in effect elsewhere in the state. The July date will mark the end of a transition period that began in January 2010, during which Bay State builders had the option of complying with the 7th edition of the code — which references the 2006 IECC and its 2007 supplement — or the amended 7th edition, which uses the 2009 IECC and includes Appendix 120 AA.

Under stretch-code guidelines, new homes larger than 3,000 square feet will have to earn a HERS rating of 65; homes under 3,000 square feet will need a rating of 70. Builders of additions to existing homes have a choice: They can meet the same HERS rating as new construction or opt for a somewhat less stringent prescriptive path.

A lower rating, HERS 80 or 85, applies to renovations over and under 2,000 square feet, respectively. However, for all but new construction, prescriptive paths are available. Stretch allows either a performance path or a prescriptive path — compliance with Energy Star Homes Builders Option Package (BOP) — for additions and renovations. Only new-home construction mandates the involvement (and cost) of a HERS rater.

Home-builder pushback. Given that rating requirement, the stretch code has generated stiff opposition from the Home Builders Association of Massachusetts (HBAM), which contends that it will increase costs and price some homeowners out of the market. “For a 2,000-square-foot home, it’s going to add anywhere from \$8,000 to \$10,000,” says Matt Cole, a project supervisor with builder Cape Associates in North Eastham. “Here on Cape Cod, our average

■ Despite strong demand for energy-efficiency workers, a shortage of education and training programs is limiting job growth in the field, according to a recent study from the DOE’s Lawrence Berkeley National Laboratory. While the equivalent of about 120,000 full-time workers is now employed in providing energy-efficiency services — with 65 percent to 70 percent of them in the building and construction trades — as many as 380,000 jobs may need to be filled by the year 2020. The full report, “Energy Efficiency Services Sector: Workforce Education and Training Needs,” can be downloaded at eetd.lbl.gov/EA/EMP/ee-pubs.html.

■ The federal government has stiffened requirements for Energy Star product certification. Under the new rules — effective since mid-April — manufacturers will no longer be able to apply for certification before submitting complete lab-test results. The automated approval process has also been replaced; now all applications are reviewed by a program staff member. The change comes in the wake of an embarrassing investigation by the Government Accountability Office, during which auditors posing as manufacturers were awarded the label for such nonexistent products as a “gasoline-powered alarm clock.”

Massachusetts Stretch Code
continued from page 17

customer is 70 years old. Are they interested in a 15- or 20-year payback?”

There's also concern on the part of some that the stretch code hasn't been completely thought out. "One of the major things not in current code that is in the stretch," Brewster building commissioner Victor Staley says, "is specific testing. When you have blower-door testing farmed out to a third-party HERS rater, how does that relate to the building code? If someone disagrees with the results of a blower-door test, where do they go to appeal it? If I make a decision as a building official, there's an appellate process in place, outlined in the state building code. But in the stretch code, if a homeowner disagrees with the result and wants to appeal, there is no process of appeals. It leaves a lot to be desired."

What's the difference? But for contractors already practicing energy-efficient construction — especially those who focus on remodeling — the stretch code may not seem much of a stretch. Paul Eldrenkamp is a remodeler in the Boston suburb of Newton, which is among the relatively

few Massachusetts towns that have so far adopted Appendix 120 AA. Eldrenkamp predicts that building officials, not builders themselves, will have the most trouble adapting to the change. "We've been beating the stretch-code requirements on our projects for several years now, for the most part," he says. "But there's going to be a huge learning curve for the industry. I've been in stretch code sessions attended by building inspectors, and they're all over the place as far as their technical knowledge goes. Some are incredibly on top of things, but others aren't."

Jonathan Kantor, another Newton-based remodeler, agrees that the appendix is not well-understood. "The people most strongly opposed to stretch don't always know what they're talking about," he says. "You hear lot of people say that performance testing is going to make renovations and additions much more expensive and difficult, but that's just not so. The base code doesn't require performance testing, and stretch doesn't require them either, for renovations and additions. It's an option, not a requirement. But I would say that this is a precursor of what the national codes will require — if not the next round, then in the one that follows." — *Dave Holbrook*

■ A North Carolina inventor has won a \$15 million judgment against Home Depot for stealing his design for a radial-arm saw guard. According to the *Miami Daily Business Review*, independent contractor Michael Powell had supplied the chain with several prototypes of his "Safe Hands" devices in response to incidents in which store employees injured themselves while cutting sheet goods.

The company made plans to install the guards in about 2,000 stores nationwide and hired a third party to manufacture them without Powell's consent. At the trial, a Home Depot purchasing agent quoted company president Tom Single as saying, "Let Mike Powell and them sue us."

■ Traditional "greenfield" suburban development may not be going away soon, but a recent EPA survey of residential building permit data from 1990 to 2008 concludes that "there has been a dramatic increase in the share of new construction built in central cities and older suburbs." Over the past six years, for example, New York City has accounted

for 48 percent of all regional building permits, compared with 15 percent in the early 1990s. The corresponding figures for Chicago were 27 and 7 percent; for Portland, Ore., 26 and 9 percent; and for Atlanta, 14 and 4 percent. The full study report, "Residential Construction Trends in America's Metropolitan Regions," is available at epa.gov/smartgrowth.

■ New York has become the latest state to comply with a provision in the 2009 American Recovery and Reinvestment Act (ARRA) by adopting the 2009 International Energy Conservation Code (IECC). The change, expected to take effect by the end of 2010, helps make the state eligible for energy-related stimulus funds. Although all 50 states accepted a share of the \$3.1 billion federal funding package — which is meant to cover costs incurred in adopting codes equal to or more stringent than the 2009 IECC — only nine have followed through: California, Montana, Iowa, Illinois, Pennsylvania, Maryland, Massachusetts, New Hampshire, the District of Columbia, and, now, New York.