In the News

IRC Adopts Residential-Sprinkler Requirement

Por at least two decades, builders and fire-safety experts have disagreed about the need for sprinkler systems in residential construction, with each side adhering to a familiar script. Both camps acknowledge that the widespread adoption of smoke alarms has led to a sharp reduction in fire deaths. But fire officials argue that the 3,000 fatalities still recorded each year are far too many and can best be reduced by adding a residential-sprinkler requirement to building codes.

Builder organizations — spearheaded by the NAHB — counter that sprinklers would add thousands of dollars to the cost of a new home and price many potential first-time home buyers out of the market. The NAHB also claims that sprinklers are subject to accidental activation and freeze damage, and require regular maintenance that many homeowners will neglect, leaving families with a false — and costly — sense of security.

Nevertheless, the argument in favor of sprinklers has steadily gained momentum. In 2001, the IRC was amended to require sprinklers in multifamily housing. Four years later, a sprinkler standard for one- and two-family residential structures was added to the code as an appendix. And earlier this year, sprinkler advocates broke through in a big way: At a September conference in Minneapolis, the International Code Council — which administers the IRC — approved two additions to the 2009 code requiring sprinklers in all new townhouses and one- and two-family residential structures.

Controversial vote. More than 26,000 ICC members are eligible to vote on code changes. But because there's no equivalent to an absentee ballot — only those physically present at a hearing can vote — most codes are enacted by a small fraction of the organization's members. The NAHB took advantage of that fact at the last sprinkler vote, in 2007, when it provided travel expenses to enough "no" voters willing to attend the Rochester, N.Y., meeting to swing the vote in its favor. (Although the pro-sprinkler forces actually had 56 percent of the vote, a two-thirds majority was required for passage.)

At the 2008 hearing, the pro-sprinkler IRC Fire Sprinkler Coalition (IRCFSC) borrowed a leaf from the NAHB playbook and funded an estimated 900 of its supporters, most of whom are fire officials. In the end, the pro-sprinkler forces carried the day by a tally of 1,283 to 470.

A fundamental shift. The inclusion of the new sprinkler provisions in the 2009 code doesn't mean that every new home will have to be outfitted with sprinklers by the 2011 phase-in date. Many jurisdictions will continue to use previous versions of the code for years, and those that do adopt the newer version are free to drop the sprinkler provisions.

"Some jurisdictions will look at their local conditions and decide they

- In July, the town board of Southampton, Long Island, amended its building code to impose graduated energyefficiency standards on all new and substantially rebuilt homes. According to Newsday, homes of up to 3,500 square feet must achieve a Home Energy Rating System (HERS) rating of 84, and those of 6,500 square feet or more, a rating of 95 or better. The town is apparently using the old HERS rating system which began to be phased out in 2006 - in which higher scores denote higher efficiency. Under the current HERS system, a low index number indicates higher efficiency, with net-zeroenergy homes rated at zero.
- The regional building slump has been so deep and longlasting the Greater Atlanta Home Builders Association has begun to offer counseling to members who need assistance dealing with mental and emotional stress, reports the Atlanta Journal-Constitution, One local builder whose company sought bankruptcy protection late last year noted that "the fastest way back is to get some emotional help." But counselor and executive coach Charlie Cummins - who's been working with the association — said that relatively few troubled builders seek professional counseling. "They see it as a sign of weakness," he said.

In the News

Sprinkler Requirement continued from page 1

don't want to adopt them," says Sprinkler Coalition spokesman Jeff Shapiro. "Even if they adopt the model code on publication, they can put in their own trigger dates." Still, says Shapiro, passage of the new provisions signals a fundamental shift. "Now the burden is on the builders to demonstrate why they shouldn't meet the national standard," he says.

Rear-guard action. Will the NAHB abandon its earlier resistance and climb on the sprinkler bandwagon, or will it choose to wage a jurisdiction-by-jurisdiction campaign against the sprinkler requirement through local and regional chapters? Shapiro says he expects the latter. "I'm told that they're putting together a research packet on how to fight a residential-sprinkler ordinance," he says. "That's fine — I wouldn't expect anything different."

But as of early November — several weeks after the pivotal vote — the NAHB was still keeping its intentions under wraps. It responded to repeated calls for information with a general written statement, attributed to NAHB president Sandy Dunn, which noted that the association does "not oppose fire sprinklers, only requirements that would mandate them in new housing," and that "this decision should be left to home buyers, not regulators."

Playing the odds. Julius Ballanco, a code consultant and president of the American Society of Plumbing Engineers, thinks the NAHB's technical objections to residential sprinklers are overblown. He notes that while sprinkler systems used in commercial

buildings do require annual service, residential systems are so simple that maintenance requirements are virtually nonexistent. "All you really need to do is look at the sprinkler heads once a year and make sure no one has painted over them," he says.

Furthermore, says Ballanco, industry figures put the odds against an accidental sprinkler-head activation at about one in 16 million. "You'll be struck by lightning 16 times before one of your sprinkler heads goes off accidentally," he says.

Changing times. The sprinkler mandate will add a layer of cost. A recent study by the NFPA's Fire Protection Research Foundation found that the cost of residential sprinklers in the 10 U.S. and Canadian communities where they are already required averages \$1.61 per square foot. And some sprinkler proponents may have a tendency to gloss over the expense. (The Q&A page on the IRCFSC Web site, for example, answers the question "Will the new sprinkler requirement increase the cost of new homes?" with a soothing "Perhaps, but the cost impact is likely to be nominal.")

Of course, many safety features that today's consumers take for granted — from automotive seat belts and air bags to ground-fault circuit interrupters and egress windows — would once have been seen as unnecessary extra-cost options. Ballanco, for one, says he doesn't doubt that consumers and builders alike will quickly come to accept residential sprinklers as well.

"They've been claiming that sprinklers will price some buyers out of the market," Ballanco says. "But builders are smart people. Once the new code takes effect, they'll learn how to market sprinklers as a good reason to buy a new, safer home." — Jon Vara

- Houses have been getting bigger fairly steadily since the Census Bureau began tracking the average size of new U.S. homes three decades ago. But now the economic downturn is likely to turn that trend around, says the *Associated Press* particularly as production builders continue to scale back floor-plan sizes. After trimming some of its 3,400-square-foot homes to 2,400 square feet last year, for example, Los Angeles-based KB Home recently rolled out a new line of Southern California homes that start at 1,230 square feet and are priced at just over \$200,000.
- With state tax rebates inducing record numbers of Californians to install rooftop solar electric panels in 2008, enterprising thieves in the San Francisco Bay area are ramping up their own efforts. According to the San Jose Business Journal, solar panels were stolen from commercial buildings in a half-dozen Silicon Valley
- communities over the summer. Sue Kateley, executive director of the California Solar Energy Industries Association, noted that in some cases the thieves rewired plundered systems to remain functional, apparently to prevent the owners from noticing the panels were missing. Some solar installers are reportedly installing security systems that sound an alarm or trigger a hidden camera when panels are removed.
- For the first time in at least a decade, the flow of undocumented immigrants into the U.S. fell below the inflow of immigrants who are permanent legal residents, says a recent study by the Pew Hispanic Center. The study also concluded that the size of the undocumented immigrant population now estimated at 11.9 million appears to have declined since 2007. The study's authors did not speculate on what caused the decline.