

NOTEBOOK

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EDITED BY JON VARA

Building Code Consolidation Hits Rough Patch

I-Codes gaining converts, but competing NFPA code is on the horizon

The International Code Council (ICC) — an organization made up of the three major code-writing agencies, BOCA, ICBO, and SBCCI — is pressing ahead with its effort to move the U.S. toward a single, truly national family of building codes, including the *International Fuel Gas Code*, *International Mechanical Code*, and *International Plumbing Code*. Two of the most closely watched of the so-called I-Codes — the *International Building Code (IBC)* and *International Residential Code (IRC)* — have already been adopted by at least six states and dozens of local jurisdictions. (The relationship between the two is similar to that between the old BOCA *National Building Code* and the CABO *One and Two Family Dwelling Code*: The IRC deals solely with one- and two-family residential structures and is a referenced standard within the larger IBC, which covers everything else.) Many other states and localities are actively considering the new codes. BOCA vice president

Terry Leppellere expects the number of I-Code converts to at least double in the coming year. “The benefits of uniformity are obvious to everyone,” he says.

NFPA fires back. Well, maybe not quite everyone. In the spring of 2000, the Quincy, Massachusetts-based National Fire Protection Association (NFPA) announced its intention to stop participating in the ICC’s code-writing process and instead develop and publish its own building code. A revised draft of the *NFPA Building Code* will be released sometime this summer, with final publication expected in 2002.

The NFPA is hardly a newcomer to the code-writing field. Many NFPA codes are industry standards, including NFPA 1, the *National Fire Code*, and NFPA 70, the *National Electric Code*. “It’s not a stretch for us to do a building code,” says NFPA spokesman Gary Keith. “Our ability to integrate our own standards into the code will be very useful.”

They started it. Other industry observers, however, have suggested that the NFPA’s move into the building-

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How Thick Is a Half-Inch?

If you call up your lumberyard and order 1/2-inch CDX plywood, the truck will almost certainly deliver panels stamped 15/32, not 1/2, inch. And if you check them with your tape, the panels might actually measure only 7/16 inch. What’s going on?

Scant sizes. Before the mid-1980s, 1/2-inch plywood measured a full 1/2 inch.

But in 1981, APA—The Engineered Wood Association issued a new performance standard for panels, called PRP-108. A few manufacturers discovered that they could meet the standards for 1/2-, 5/8-, and 3/4-inch plywood even when they manufactured slightly thinner panels — 15/32, 19/32, and 23/32 inch — called “scant sizes.” Because thinner panels cost less to make, every plywood producer soon adopted scant sizes, which now dominate the market.

Meanwhile, on the job site and at the lumberyard, almost everyone continued to refer to 15/32-inch plywood as 1/2-inch. The plywood manufacturers, however, insist the accurate description is “nominal 15/32-inch.” The word “nominal” is necessary because a 15/32 panel sometimes measures less than 15/32 inch. Since the tolerance for plywood

manufacture is plus or minus 1/32 inch, a panel of 15/32-inch plywood can measure anywhere from 7/16 inch to 1/2 inch.

Weights and Measures weighs in. According to some officials in state offices of weights and measures, lumberyards that advertise 1/2- and 3/4-inch plywood and deliver 15/32 and 23/32 are breaking the law.

The State of California successfully prosecuted Home Depot for such advertising in 1993. Home Depot agreed to pay a civil penalty and to begin advertising plywood using the same dimensions with which they are stamped, the so-called scant dimensions.

Some weights and measures departments go further, however, objecting to the relatively wide tolerances in plywood dimensions. There have been attempts

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APA
THE ENGINEERED
WOOD ASSOCIATION

RATED SHEATHING
32/16 15/32 INCH
SIZED FOR SPACING
EXPOSURE 1
000

STRUCTURAL I RATED
DIAPHRAGMS-SHEAR WALLS
PANELIZED ROOFS
PRP-108 HUD-UM-40

Most so-called 1/2-inch plywood is marked with an APA stamp reading 15/32 inch. Since 15/32-inch plywood may, in fact, measure anywhere from 7/16 inch to 1/2 inch thick, APA refers to it as “nominal 15/32.”

How Thick Is a Half-Inch?

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for several years at the National Conference of Weights and Measures (NCWM), a standard-setting association, to achieve a new consensus standard to regulate plywood dimensions, but plywood manufacturers and state weights and measures officials have been unable to reach an agreement.

Too thin. "In one case, we measured a batch of plywood, and it was too thin by well over 1/16 inch," says Dennis Johannes, assistant director of the California Division of Measurement and Standards. "In the state of California, a product has to meet or exceed the stated quantity on average. If some pieces are 5 percent below the stated measure, then some pieces should be 5 percent above." According to Steve Morrison, chief deputy sealer of the San Luis Obispo (Calif.) County Department of Weights and Measures, there is a simple reason plywood is often thin. "I believe that the manufacturers are targeting the lower end of the tolerance," says Morrison.

According to the APA—The Engineered Wood Association, many mills can't improve their tolerances. "The weights and measures people look for a tolerance of 3 percent, but that is just not possible with most of the existing mills," says Bill Baker, manager of codes and engineering at APA. "Most of the panels made today are made on a performance basis. The panels are qualified for certain span ratings. If anyone is targeting the lower end of the tolerance, the panels still work." In the absence of an NCWM agreement, resolution of disputes over acceptable plywood tolerances will depend on local interpretations of state consumer law. Are plywood manufacturers likely to agree to a new NCWM standard in the future? The APA's Bill Baker doesn't think so. "I think we're through with them," he says.

Building Code Consolidation

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code arena has more to do with profit-producing code-book sales than anything else. And while both organizations are careful not to speak ill of one another directly, signs of tension are not hard to find. The ICC's Web site, for example, contains dozens of letters of complaint addressed to the NFPA, presumably from writers who had forwarded copies of their correspondence to the ICC. "As a building official, I am writing to express disappointment at the recent announcement that the NFPA has decided to begin the development of a model building code," one writer began. "The news [that] the NFPA's Board of Directors had entered the building code fray by directing the Standards Council to develop a new building code project did not shock so much as sicken me," wrote another.

Waiting in California. An added source of confusion is the continued existence of older codes. Although SBCCI, BOCA, and ICBO will no longer be publishing updated versions of their individual codes, some jurisdictions now using them may be reluctant to give them up. The State of California, for example, recently elected not to adopt the *IBC* in place of the current *California*

Building Standards Code, based on the 1997 *Uniform Building Code*. "I'm not sure what we'll do at the end of the 2003 code cycle," says California building standards chairman Stanley Nishimura. "We may go to the *IBC*, but the new *NFPA Building Code* will also be available by then. We'll be considering all the options."

One for all, all for one. Meanwhile, at least one California municipality — the City of Pasadena — has moved to the *I-Codes* independently, adopting the *IBC* and the *IRC*, as well as the *International Plumbing, Fuel Gas, and Mechanical Codes* as approved alternates to the state code. That has raised the hackles of state authorities, who maintain that localities have no power to adopt model codes on their own. The matter has been referred to the state attorney general's office, which is expected to issue an opinion soon.

Now what? Does all this intrigue and infighting mean that the dream of a single nationwide code — the subject of so many optimistic pronouncements just a few years ago — is a lost cause? No one seems anxious to say so just yet, but a general lowering of expectations seems to be underway. "We're continuing to look four, five, and six years ahead," says Ron Burton of the NAHB. "Even then, there will always be variation. You'll never have 100 percent."

OFFCUTS

The online building permit service PermitsNow has gone out of business after failing to obtain the new round of funding it needed to continue operating.

Home Depot may expand into Latin America, according to *Reuters News Service*. Increased competition and slowing growth in the U.S. market reportedly has the Atlanta-based company considering opening new stores in Puerto Rico, Argentina, Chile, and Mexico.

HUD has launched a new program to provide no-cost lead safety training to builders and maintenance workers. The one-day summer courses are available in more than 200 communities and will satisfy the training requirements of HUD's Lead Safe Housing Rule. For information, contact HUD's Lead Paint Compliance Assistance Center at 866/483-1012.

OFFCUTS

Manufactured housing placements continue to drop, according to *Builder* magazine. There were 197,000 manufactured housing placements in November 2000, the lowest level since May 1992.

Dutch builders are experiencing a severe labor shortage, according to a recent story in the *New York Times*. Desperate Dutch builders are now recruiting construction workers in Germany, where the unemployment rate is higher than in Holland. "You can't find enough electricians, you can't find any old-fashioned tradesmen anymore," lamented one employment recruiter.

Researchers at North Carolina State University are experimenting with "breakaway walls" for the ground floors of buildings in coastal flood zones. To minimize danger from storm surges, the walls are designed to break loose from their support pilings at a predetermined pressure. Although the researchers have so far focused on wood framing, they hope to test cement-block walls in the future — if they can figure out how to prevent the masonry walls from destroying the wave tank when tested to failure.

A California land company's use of bird-scaring noisemakers has landed it in hot water, according to the *Los Angeles Times*. A coalition of environmental groups charges that the Newhall Land & Farming Company's use of so-called hazing devices to frighten endangered migratory birds away from a Santa Clarita construction site violates federal environmental law.

No Wiring for the Amish

Amish and Mennonite builders in Pennsylvania don't use electricity in their own homes, nor do most of their customers. That caused few problems when most of the state's rural communities lacked building codes, but when Pennsylvania adopted its first statewide code, in 1999, the Amish found themselves subject to a requirement that all houses be wired, whether the wiring would ever be used or not.

That potential impasse was resolved in June of this year, when Pennsylvania governor Tom Ridge signed a bill that exempts some state residents from key provisions of the code, which is expected to take effect next year. To take advantage of the new law, a homeowner must provide proof of membership in a recognized religious sect that does not condone the use of electricity. No Amish builders could be reached by telephone for comment, but Frank Christoffel of the Building Industry Association of Lancaster reported that the bill — sponsored by State Representative John Barley, a Conestoga Republican — sailed through the legislature with ease. "The Amish are a huge tourist attraction around here," he said. "I don't think there was any opposition at all."

Utah City Bans Small Homes

In various communities around the country, courts have struck down municipal zoning changes intended to limit access to low-income housing. But whether any single ordinance constitutes exclusionary zoning is hard to say and depends on the specific facts of the case. "Exclusionary zoning cases are not easy to prove," says Mary DiCrescenzo, NAHB's senior vice president for legal affairs.

The City of Clearfield, Utah, for example, recently increased the minimum permissible size for a single-family home from 1,200 square feet to 1,500

square feet. "We have a lot of starter homes, and we wanted some second-time-buyer homes. We felt we wanted some nicer areas," says Kent Bush, planning and zoning administrator for Clearfield.

Clearfield's new ordinance has been a blow to starter-home builders. "Clearfield is the only city in this area that restricts the size of the home," says Gary Wright, division manager for Ivory Homes, a builder in Clearfield. "They only want more expensive homes built in the community. It has priced the first-time buyer out of the market."

Whale of a Job

After nailing up tens of thousands of cedar sidewall shingles, you might start to see some unusual forms, too.



To provide needed contrast with the red cedar, cutouts in the design are backed with white cedar inlays (above). Williams air-nails the field shingles but reverts to hand-nailing for the fancy stuff (above, right). At right, the nearly completed figure.



"After I've worked out one figure, I don't like to repeat it — I'll do it, but the challenge is gone," says Williams, who charges about \$1,500 per figure.

Carpenter Robert Williams's tessellated figures take shape, one shingle at a time, in his basement shop. An artist friend draws the original outline on a 5x5-inch grid to match standard shingle exposure. Williams cuts the figures out of western red cedar shingles, which are brushed with transparent Sikkens preservative, to contrast with the white cedar shingles used for this field. Concealed inlays and wandering cuts highlight details like this whale's eye and fins.

TAX TALK

IRS Simplifies Tax Deposit Rules for Small Businesses

by Milton Zall

In a step to simplify a major area of tax administration, the Internal Revenue Service ended monthly tax deposit requirements for about 1 million small businesses. Beginning January 1, 2001, many small businesses can make employment tax payments on a quarterly basis, instead of monthly.


Previously, a business was required to deposit employment (social security and Medicare) taxes on a monthly basis if its net taxes were \$1,000 or more per quarter.

The new IRS rules do not require businesses to make monthly payments unless they have more than \$2,500 in quarterly employment taxes. Small businesses with less than \$2,500 of employment taxes per quarter may pay those taxes when they file Form 941, "Employers Quarterly Federal Tax Return."

The IRS estimates that the difference between the

\$1,000 and the \$2,500 threshold will affect payment requirements for about 1 million businesses.

The change creates a number of advantages for small businesses:

- IRS dunning notices are expected to decrease by about 70 percent because there will be fewer deposits.
- Because this change will reduce the frequency of deposits, small businesses will experience fewer mistakes and fewer penalties.
- Payments on a quarterly basis — rather than monthly — will help small businesses with their cash flow because they will have use of the taxes withheld for longer. 

Milton Zall is a Certified Internal Auditor and a Registered Investment Advisor. He can be reached via email at miltzall@starpower.net.