# **Court Ruling Could Put Codes on the Web**

Postings exceed "fair use," codewriting organizations say

If a Texas Appeals Court ruling is upheld by the U.S. Supreme Court, building codes adopted by states and towns could become freely available over the Internet. The Southern Building Code Council International (SBCCI) has turned to the high court to reverse the lower court's decision in favor of a Texas man who posted most of the Standard Building Code (SBC), the Standard Fire Code, and several other southern codes in their entirety on his website, where anyone could read or copy the text free of charge. Depending on how the justices rule, all the national code organizations could lose copyright protection for any code that has been adopted by a state or locality. The organizations

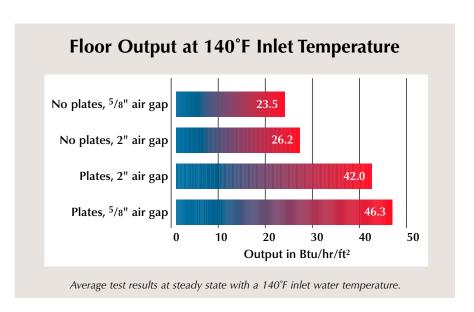
that create codes might then have to find a new source of revenue, or close up shop.

Copyrights vs. Bill of Rights. The Texas case involved a retiree named Peter Veeck, who copied Standard Code language from an SBCCI computer disk straight into web pages on his informational site. Veeck deleted references to SBCCI and described the text as the building codes of two tiny towns in his area, Anna and Savoy, Texas, both of which have municipal ordinances adopting the SBCCI codes by reference.

Reacting to a copyright lawsuit threat from SBCCI, Veeck's lawyer, Robert Weisberg, asked a federal district court for protection. Once a state or town makes model code compliance a legal requirement, argued Weisberg, the code language enters the public domain, voiding any continued on next page

## **Study Examines Staple-Up Radiant Heating**

■ow do aluminum heat-transfer plates and insulation placement affect the heat output and recovery time of staple-up radiant floor heating systems? A recent ASHRAE-funded study conducted at Kansas State University — and described in the Radiant Panel Association Newsletter, Radiant Panel Report — evaluated the performance of four different configurations of tubing and insulation, two of which used aluminum heat-transfer plates and two of which did not. One of the plate-equipped systems and one of those without plates were insulated with rigid foam insulation pressed tightly against the underside of the tubing; in the remaining two, the insulation was suspended beneath the tubing, leaving a 2-inch air gap. All four assemblies used identical 1/2-inch hydronic



tubing stapled to the underside of the subfloor at 9 inches on-center.

The researchers found that when

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copyright and giving all citizens the right to publish the text freely. Circuit court judge David Folsom sided with SBCCI, but the Fifth Circuit Court of Appeals ruled for Veeck in a 9-to-6 split vote. "As law, the model codes enter the public domain and are not subject to the copyright holder's exclusive prerogatives," wrote appeals court judge Edith Jones for the majority.

But while the appeals court sided with Veeck, attorneys for SBCCI say that in practice, citizens have plenty of access to the text of the codes under existing arrangements. Moreover, they claim, a wholesale voiding of their copyrights would prevent code bodies from being able to create the code in the first place, depriving the public of a needed service. Not surprisingly, other code-writing organizations — including BOCA, ICBO, NFPA, ASHRAE, and even the American Medical Association — have sided with SBCCI.

Fair use. In oral arguments in front of the appeals court, SBCCI's attorney Robert Veal conceded that towns and cities do have an obligation to put citizens on notice about the contents of the code, but he told the judges that a city could post its code on the

Internet "and still recognize that SBCCI has the right to go against another commercial publisher who would...photocopy...and sell it."

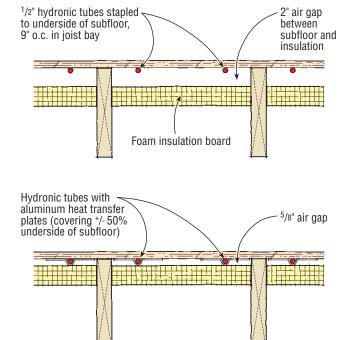
Essentially, the codes and standards organizations argue that the legal doctrine of "fair use" allows individuals to copy portions of codes or other copyrighted material for their own use but also allows the holder of a copyright to prevent rival publishers — or an individual with a website, like Veeck — from making that information available wholesale.

In fact, as Veeck pointed out, SBCCI permitted North Carolina to publish its state code, drawn with few modifications from the southern code, on the web even as the code body was suing Veeck. North Carolina's current building code is no longer posted online, but Florida, one of several states that has signed a brief in support of Peter Veeck, currently has an extensive code website.

Code authorities are eager to have the Supreme Court take the case. But Veeck's supporters are content to let the ruling stand as law — at least in Texas, Louisiana, and Mississippi. Most of the filings in the court case are now posted on Veeck's website at http://regionalweb.texoma.net.

#### **Study Examines Radiant Heating**

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140-degree water was circulated through the systems at 4 gpm, the plate-equipped test assemblies increased heat transfer to the living space by between 160% and 172%, compared to the systems without plates. The placement of the insulation accounted for that relatively minor variation in Btu output, with the closely insulated tubing transferring more heat than the tubing with the air gap did. (Because the study noted only average surface temperature, however, it's possible that the air-gapped insulation produced more uniform floor-surface temperatures.)

On the other hand, the insulation placement had a much more pronounced effect on the recovery times of the test systems. In test systems without aluminum heat-transfer plates, a 2-inch air gap beneath the tubing resulted in a 235% increase in ramp-up time, the time needed for the system to reach a steady-state heat output. Further information on ASHRAE Research Project 1036, "Develop Simplified Methodology to Determine Heat Transfer Design Impacts Associated with Common Installation Alternatives for Radiant Conduit," is available from ASHRAE (www.ashrae.org).

#### **OFFCUTS**

The Northeast Florida Builders Association will teach construction skills to cadets in the Florida Youth Challenge Academy, according to a report in the Jacksonville Financial News and Daily Record. The academy program, which is sponsored by the state's National Guard and Department of Education, supports learning and growth for at-risk youth in a military-style structured environment. The trainees will get hands-on experience working on projects of the association's "Builders Care" initiative, says NEFBA president Denise Wallace.

Home mortgage foreclosures in the Atlanta metropolitan region have nearly doubled in 2002, according to the Atlanta Business Chronicle. The paper reports that roughly 20,000 homes have been advertised for foreclosure during the year. Experts say employment losses are a factor in the increase, but they also point to a trend toward unconventional mortgages that let less financially secure buyers borrow money for home purchases; those buyers then may become unable to make payments.

Fannie Mae is offering experimental "smart commute" mortgages to Pennsylvania home buyers who locate near public transportation. Under the pilot program from the nationwide backer of home mortgages, borrowers can apply estimated savings from mass-transit commuting to their qualifying incomes when taking out a first-home mortgage. For information call 888/801-4651.

Bob the Builder has replaced Barney the purple dinosaur as a cartoon role model for many children, according to the Associated Press. The AP story noted that in 2001, Bob's theme song, "Can We Fix It? Yes, We Can!" became Britain's hottest-selling song since Elton John's "Candle in the Wind." It remains to be seen whether the increased interest in construction will ease the long-running labor shortage as the show's viewers begin looking for work, ten or fifteen years from now.

### **Solar Goes to Washington**

Por ten days this fall, by touring a collection of temporary solar-powered houses on the National Mall, visitors to Washington, D.C., had a chance to experience what solar enthusiasts hope the future of housing will look like. The structures were designed and built by students from 14 colleges and universities as part of an event called the Solar Decathlon, in which student teams competed to design and build aesthetically pleasing demonstration homes that combined comfort and convenience with maximum energy production and efficiency.

The homes — which were limited to 500 square feet for the purpose of the competition — were judged on ten criteria chosen to evaluate their effectiveness in tapping solar energy for a variety of tasks, includ-



Auburn University student Chris Jackson works on his team's entry at the Solar Decathlon in Washington, D.C. The model home featured innovative "solar megaphones," which used prisms to provide interior daylighting. Auburn University finished third in the competition, behind the University of Colorado and the University of Virginia.

ing heating and cooling, hot-water production, and lighting, as well as operating home appliances and computers and charging an electric car. The overall winner was a three-module SIPs structure built by students from the University of Colorado. For producing domestic hot water, the Colorado team used an innovative evacuated-tube solar collector, which works something like a thermos bottle to minimize heat loss. Perhaps in recognition of the fact that overall environmental "friendliness" is a frequent concern of potential solar home buyers, the University of Colorado home also featured a variety of green construction materials, including bamboo, recycled plastics, sunflower-board cabinets, and raw sheep's wool insulation. Support for the decathlon was provided by the U.S. Department of Energy (DOE), the DOE's National Renewable Energy Laboratory (NREL), and a number of corporate sponsors. More information and images of the homes are available at www.solardecathlon.org.

orth America, it appears, is not about to run out of trees. Alberta, Canada, for instance, is cutting only 68% of what it considers to be its maximum sustainable tree harvest, according to provincial government reports.

But even if Alberta did run out of trees, it would still have boards. thanks to the efforts of the Alberta Research Council (ARC). ARC engineer Wayne Wasylciw and his colleagues have invented a machine to split wheat straw into 6-inch to 8inch strands suitable for making structural board, and they've developed a process to make OSB-like wheat-straw panels that Wasylciw says can "outperform OSB." ARC is calling the product OSSB, for "oriented split-straw board." A few dozen prototype panels are being field tested in selected applications.

The straw panel scene was a little shaky last year, says Wasylciw, with most manufacturing plants either bankrupt or headed that way. But Dow Chemical's purchase from failed Isobord of the large Ely, Minn., straw particleboard facility — and relaunch of the product under the trade name Woodstalk — has brought some credibility back into the straw board industry. One company is working

the power of a conventional battery.



with ARC on commercializing a straw-based medium-density fiberboard (MDF) panel, says Wasylciw, and wants to pursue OSSB if the MDF product works out. And Wasylciw says he has four projects afoot to site OSSB plants in nations abroad, where a scarcity of trees makes straw a logical resource choice.

The North American market will be a tougher sell. Craig Adair, market analyst for APA-The Engineered Wood Association, notes that wood-based OSB production capacity has grown faster than demand

in recent years, forcing more expensive plywood plants to close. Home Depot, for instance, has reportedly dropped OSB prices from \$7 to \$4 a sheet recently. As for fiber, Adair says, "Forests keep growing and forest managers are trending to faster rotations with smaller trees to service OSB and other engineered wood products that don't need the large trees. So the resource will surely be there and will be economical in the future."

#### **OFFCUTS**

Engineers at MIT are developing tiny turbine engines that could eventually be used to power portable hand tools. An article in the July 2002 issue of Smithsonian magazine speculates that a tiny kerosene-fueled turbine generator, etched from a silicon wafer, could produce 10 to 20 times

Ten years after wreaking havoc on South Florida, Hurricane Andrew has gained strength. In August of 2002, scientists with the National Oceanic and Atmospheric Administration (NOAA) announced that the destructive storm was even stronger than originally believed. Based on new research, NOAA upgraded Andrew from a Category 4 to a Category 5 hurricane — the highest rating on the Saffir-Simpson Hurricane Scale.

Pope John Paul has blessed a Toronto SIPs house being built by Habitat for Humanity. According to the Structural Insulated Panel Association newsletter, the pontiff performed the "drive-by blessing" of the 21-by-44-foot bungalow from the famous Popemobile during the annual Catholic World Youth Gathering held in Toronto last July.

# **Union-Funded Home Mortgages**

Most single-family houses in the U.S. are built by nonunion labor, but an innovative home-loan program now in operation in several states aims to give union labor a larger piece of the residential-construction pie.

ProLoan mortgages — which are funded by union pension funds — offer home buyers financial incentives to work with contractors who agree to make a "good-faith effort" to use union subs. According to Al Sterner, field administrator for the ProLoan program in the Milwaukee area, contractors who continue to use nonunion workers when a unionized alternative is available are weeded out of the program.

Buyers who enroll in the ProLoan program benefit from a lock on interest

rates while their homes are being built, with a one-time option to "float down" to a lower rate if interest rates decline before the loan closes. To further sweeten the deal, participating home buyers can get up to \$2,000 in cash if their general contractor actually uses union subs.

The ProLoan program got its start two decades ago in the union stronghold of St. Louis, where about 85% of all new houses reportedly use some union labor. Within the last few years, it has expanded into other markets, including Louisville, southern Illinois, and Milwaukee. The president of one participating Milwaukee firm, Jim Burg of JFK Builders, notes that ProLoan provided his company — which employs 80 car-

penters and focuses primarily on woodframed multifamily projects — with an attractive opportunity to move into the single-family market, which is dominated by small nonunion builders.

In effect, notes Tom Heinsz, director of organizing for the Carpenters District Council of St. Louis, the ProLoan program makes bank representatives, loan officers, and real estate agents into union organizers. "All of these 'organizers' are very diligent about making sure there are union subcontractors on the job," Heinsz writes in an article on the ProLoan website (www.proloan.com). "There have been instances when a contractor will sign a contract with us because he knows he will lose home sales if he does not."