

EIGHT-PENNY NEWS

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STATE BY STATE

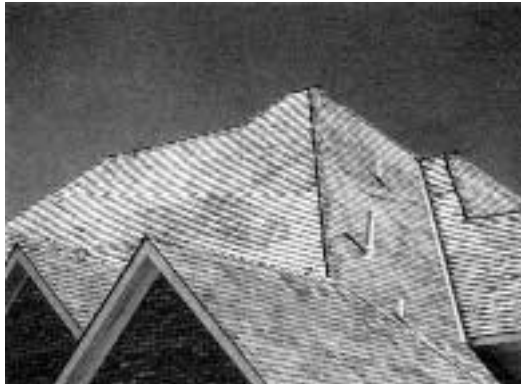
Rhode Island: In a state where construction money has been very hard to come by lately, the state housing finance authority, working with the Rhode Island Builders Association, has made \$5 million available for new construction financing for affordable homes. The homes must be owner-occupied and sell for no more than \$130,266. Officials say the program should produce as many as 200 new homes.

Massachusetts: Controversy has erupted over a new proposed lead-paint bill that reduces owners' "strict liability" for lead-poisoning problems if the owners have removed the most dangerous sources of lead poisoning, such as chipping or loose paint. State law now assumes any lead poisoning came from the house and holds the owner responsible. Landlords would welcome some relief; some have lost suits for as much as \$1 million under the present law. Child-health advocates, however, say that the loss of the strict liability clause and other protections the proposed bill eliminates will let even negligent landlords off the hook and leave children at risk.

New York: New York may join Maryland, Massachusetts, and other states in requiring that remodelers who remove lead paint be trained and licensed by the state. The proposal is part of the state's lead poisoning prevention act, currently under consideration by the state legislature.

Vermont: Vermont contractors short on cash can now participate in the Vermont Barter Network, a business-to-business network that allows businesses to exchange products and services instead of cash. The network plays matchmaker between member companies, giving dollar-equivalent credits for goods or services supplied; the credits can then be redeemed with any other member company. For more information, call Kim Smith at 802/893-7557. □

White Cedar Shingles: Not What They Used to Be?



Today's white cedar shingles are turning bad fast, according to builders and wood industry experts. Some blame acid rain, others tight houses, but most feel the problem is shorter harvest times and younger wood.

After years of using untreated white cedar roofing shingles, Massachusetts home builder Jack Rogers has switched to a masonite roofing product. White cedar roofs installed on homes he's built are failing after eight to twelve years. He remembers when they were supposed to last 50. He's convinced "something's happening with the wood."

The experts are backing him up. Brian Buchanan, a forest products researcher at Texas A&M Forest Products Lab, has studied shakes and shingles extensively. He says Rogers is lucky to get 12 years, since most white cedar shingles these days don't last more than eight years in Texas, and some fail after two to three years.

Some of that is the difference in climate. In a northern climate, snow and cold temperatures can postpone the decay that causes most roof failures. But everyone JLC talked to agreed with Rogers that white cedar roofs are failing sooner than they used to, no matter where they are installed. (Red cedar shingles, meanwhile, continue to hold up more or less as expected, given proper installation — see the article "Wood Shakes and Shingles," in this issue.)

New vulnerability to an old problem. According to Nancy Carey of the Cedar Guild, a Lyons, Ore., shingle producer, white cedar

shingles are suffering from a very common wood decay agent — a soft rot fungi that attacks the shingle's wood fibers. Eventually the fungi reduce the shingles to the consistency of a sponge

when wet, and of a crumbly cookie when dry.

Theories abound as to why the fungi seem to have an easier time destroying the shingles these days. Some observers blame the trend toward tighter housing that came with the 1970s energy crisis. Others believe acid rain may be speeding decay.

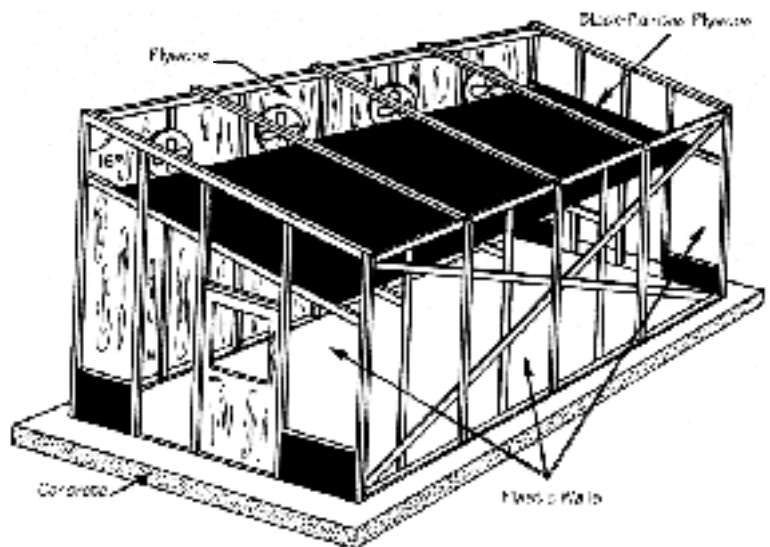
But the most common and well-supported theory is the one held by wood products experts such as Buchanan, Terry Hiley of the U.S. Forest Laboratories (in Madison, Wis.), and Paul Fiset of the Wood Technology Program at the University of Massachusetts (in Amherst, Mass.). All three believe that white cedar shingles of the last decade or so are deteriorating faster because they are being milled from younger, less tightly grained trees.

The younger the tree, the more sapwood there potentially is in the shingle. Sapwood contains fewer preserving extractives than heartwood, and therefore has less protection against mold and mildew. Buchanan believes that even heartwood from second- or third-growth trees will be less resistant to mold and mildew than heartwood from old-growth trees. He says that new growth heartwood has 20% to 50% less of the preserving extractives.

What to do? If you're set on white cedar shingles, you should take some precautions. First, avoid ordering shingles made from sapwood. Unfortunately, that's not so easy to do. Buchanan likens buying white cedar shingles to buying a "pig in a poke." He

Continued on next page

Dry Your Own Wood



This fan-assisted solar wood kiln is one of 31 designs illustrated and described in *Solar Heated, Lumber Dry Kiln Designs*, published by the Department of Forest Products at Virginia Polytechnic University. Most of the kilns require basic, inexpensive materials and appear easy to build. Most use a black surface — often plastic — to absorb solar heat and transfer it into the air, which is then typically circulated around piles of drying wood with fans. The dryer pictured here, built in Puerto Rico, features two layers of glazing, a corrugated, black metal absorber 12 inches below the roof glazing, circulating fans, and a small humidifier to prevent "casehardening" at the end of the drying cycle. It holds 3,000 board feet and dries 1-inch-thick mahogany from a 50% moisture level to an 11% moisture content in 30 days.

To order a copy, send \$14.95 to the Department of Forest Products, *Solar Kiln Booklet*, Brooks Forest Products Center, Virginia Tech, Blacksburg, VA 24061. □

From What We Gather

Rookies get hurt the most, says a recent report issued by the U.S. Department of Labor. The report found that employees with only a few months' experience suffered the greatest percentage of job-site accidents. It also found that workers between 20 and 24 suffered 20% of accidents while composing only 13% of the work force. Monday is the day with the most accidents, while Friday has the least.

Most Americans would rather own a home than retire ten

years early, according to a recent survey reported in Huntington Federal Bank's *Real Estate Newsletter*. The survey found that Americans preferred 3 to 1 to own rather than retire early; preferred 4 to 1 to own rather than take a better job in a city in which they could only afford to rent; and felt 2 to 1 that owning a home is worth taking a second job for, if that's what it takes.

Fear of being fired is preventing many potential home buyers from committing

themselves to mortgage payments, according to Resource Information Systems Inc. (RISI), a construction industry survey and consulting firm. Recent layoff figures from around the country read like the populations of small towns: Aetna, 4,800; Hughes, 9,000; Alcoa, 2,100. Even with the current low interest rates, without job security, people hesitate to buy. RISI contends that until the Federal Reserve lowers rates even more and the layoffs stop, the housing industry is unlikely to recover.

Global warming could decimate pine and other major lumber-producing softwood species if carbon dioxide levels double over the next century, as some scientists have predicted. The report, published in a recent issue of *Science*, said that the resulting "greenhouse effect" could raise temperatures 1.5° to 4.5° Celsius, wiping out vast stretches of softwood forests.

Microwave, squish, cut — that's the recipe for increased wood production and

improved quality being investigated by a team of researchers in Japan. The Nara Prefectural Forest Experiment Station is working on a technique in which raw logs are heated in a huge microwave oven until they become soft enough to dent with a finger, and are then compressed into square timbers. The process, reports the *Nikkei Weekly*, can make crooked logs straight, reduces the chance of splitting or warping, and increases strength. □



Yes On The Bike, Hold The Broccoli

Franklin Roosevelt once said prosperity in America meant a car in every garage and a chicken in every pot. Now city officials in Greenfield, Calif., put a new spin on Roosevelt's words: "We want two bicycles in every pot," says Arturo de la Cerda, city manager. To that end, the city recently required that builders in two local subdivisions provide two adult-sized bicycles with every house they sell.

The requirement is at once whimsical and serious. "Some of the environmental and air quality regulations the state is asking us to enforce are just ludicrous," de la Cerda says. "Requiring the bicycles is in keeping with the extreme and often ridiculous regulatory environment in this state."

At the same time, the requirement has generated a lot of publicity for the city and the builders. "This has turned out to be a great marketing tool," de la Cerda says. "I'm not sure that it's such a good method for reducing pollution, though. I don't know how many residents would seriously consider replacing their cars with a bicycle."

As for the part about the broccoli, Greenfield, in the heart of California's agricultural area, is the self-proclaimed broccoli capital of the world. □

Making Room in the Kitchen and Bath

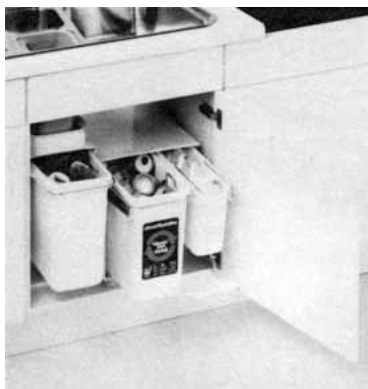
After more than a year's anticipatory fanfare, the National Kitchen and Bath Association (NKBA) has released its new design manuals for kitchens and baths. The new guidelines — known to K&B designers as simply "the new rules" — result from an extensive University of Minnesota study commissioned by the NKBA. While most of the changes affect kitchen design, there are also a few new rules for the bath.

More space, more stuff. While the new rules leave intact the basic kitchen "work triangle" between the sink, refrigerator, and cooking surface, they establish new guidelines for accessibility (mainly concerning clearances and widths); storage for all that kitchen gadgetry (the number of items in the kitchen has more than doubled in the last 40 years); and recycling.

The microwave, for instance, now gets its own work area, preferably a shelf, with space for utensils and its own adjacent "landing area" (at least 15 inches of counter space).

Other high points in the new rules include:

- Kitchens up to 150 square feet require at least 132 inches of usable countertop. Larger kitchens require at least 198 inches
- At least two waste receptacles must be included, one for garbage and one for recyclables
- The work triangle — the shortest distance between the refrigerator, sink, and primary cooking surface — should total less than 26 feet, with no leg longer than 9 feet or shorter than 4 feet
- Ground-fault circuit



Recycling bins are one of several new standard features called for in the new NKBA design standards.

interrupters must be used on all receptacles within 6 feet of a water source

In the bath. Bathroom requirements also show a new emphasis on accessibility and safety. They include:

- A mechanical ventilation system
- Ground-fault circuit interrupters on all receptacles
- At least one grab bar in the tub or shower
- A minimum usable shower interior dimension of 32x32 inches
- A bench within the shower
- Pressure balance/temperature regulators or temperature-limiting devices on all showerheads
- And for the luxo job: Bidets must have at least 15 inches of clearance to each side and 21 inches in front; but storage for soap and towels must be within easy reach. □

Not Just Your Basic Women's Auxiliary

Working with your spouse is a joy and a headache. It incorporates the best aspects of your marriage, as well as all the weaknesses. In the San Francisco Bay area, women who work with their husbands or with male partners now have a new way to cope with this mix of business and personal pressures. The Tweezers are a group of women who meet over lunch every six weeks to discuss administrative issues, such as liability insurance, contracts, and worker's compensation, as well as the more nebulous issues surrounding working with one's spouse. The group is part of the Splinter Group, a Bay Area association of builders and remodelers.

The meetings are not gripe sessions, says Sally Van Oosbree, business manager of Van Oosbree Construction in Oakland, Calif. "This is an opportunity to exchange ideas about the construction business with other women," she says. □

Shingles, continued

says that white cedar is so light it's hard to characterize by lighter tones characterized by sapwood. So you could be buying and installing shingles made from sapwood and not really know it. Fisette suggests that you bypass the "clear" grade (which may contain sapwood) and order "clear extra" or "all heart."

You can buy extra protection by having the wood treated — the route recommended by both Buchanan and the Cedar Guild. (Buchanan says the treatments, if properly applied, are good enough to let you use pine shingles.) This requires follow-up treatment with wood preservatives every five years. If the roof already exists, the Guild says you can slow decay if you treat it before the fungi takes hold.

You could also buy shingles treated with one of several new processes that deeply impregnate the shingles with what Buchanan says appears to be a wax-based water repellent (the process is proprietary) at the same time CCA is applied. These cost more but, according to Buchanan, can be warranted for up to 50 years.

Finally, consider using the more expensive red cedar shingles or shakes. Red cedar has more preserving extractives to begin with, says Paul Fisette, and since the sapwood is much lighter than the heartwood, it's easier to weed out the sapwood shingles.

— Kathleen O'Brien

Tracking Embodied Energy

Mention energy efficiency and most contractors think of high insulation levels. Some may think of fluorescent fixtures and efficient appliances. But few look at the total life-cycle energy use of a house — that is, the energy used not just by living in the house, but in harvesting, manufacturing, transporting, installing, and maintaining the house's materials and systems. This "life-cycle" energy use can vary significantly depending on what materials and techniques a builder uses.

The Canadian Mortgage and Housing Corporation (CMHC) recently developed a method for estimating this life-cycle energy use, as well as the general environmental impact of a house. Soon to be available on computer disk, the Optimize program will calculate the energy required to construct a house (called "embodied energy"). It will also calculate the amount of pollutants generated by the house's use and the manufacture of its materials. In addition, the program will calculate the indoor emission

rates for nine volatile organic compounds (which cause smog) commonly used in construction.

While the program will not estimate the operational energy required by a house, it will permit users to input operating energy data from other programs (of which there are many), and, adding that to the embodied energy, calculate the house's total life-cycle energy use.

For more information, contact Wayne Webster or Peter Russel at CMHC, 700 Montreal Rd., Ottawa, ONT K1A 0P7, Canada; 613/748-2306.

— Carl Hagstrom

TAX TALK

One for the Boss; One for the Bees

by Milton Zall

In their never-ending quest to give Uncle Sam fewer tax dollars, many contractors overlook two readily available income tax saving steps. One concerns taxes paid on corporate income; the other concerns taxes paid on some of your employee's salaries.

Estimated tax installment payments. Under existing law, small business corporations (those grossing less than \$1 million in each of the last three years) must make quarterly estimated tax payments that together equal either 100% of the previous year's tax liability or 90% of their current year's tax liability. In these lean times, the question recently came up: How much must you pay quarterly if your previous year's taxes were zero (because you had a net operating loss)? Can you avoid paying any estimated taxes during the following year, since 100% of zero is zero?

The IRS answer was (you guessed it): No. Revenue Ruling 92-54 said that the prior-year provision does not apply to a business that filed a return with a zero tax liability. If that was the case, the company's combined quarterly payments must equal 90% of its current year's tax liability.

On the plus side, however, the ruling does supply a nice tactic for businesses running close to the break-even point this year. If you're barely breaking even this

year but 1993 looks to be better, make every effort to keep your 1992 tax liability above zero. (In other words, make sure you make a paper profit. This can be controlled by year-end spending, depreciation strategies, and what not — see your tax consultant.) That way, if you pay, say, \$100 in income taxes in 1992, you can use the prior year method in 1993 and make four quarterly payments of only \$25 each, keeping you up with the 100% prior year method of payment. Just make sure you have the remainder of your 1993 tax liability on hand to pay in full when you file on April 15 the following year.

These things can get tricky, of course, so you should check with a good tax accountant before doing this.

Advanced Earned Income Credit payments.

Would you like to give some of your employees more take-home pay — without increasing your payroll? This may be possible if you have employees with family incomes of less than \$23,370. The trick is in taking early the Earned Income Credit (EIC) for which employees at that salary level may qualify, but which commonly isn't taken (as a refund) until tax day the following year. (Some eligible employees may be neglecting to take this credit at all.) Taking these credits in advance, by withholding the credited income tax

from the paycheck, can increase take-home pay by as much as \$25 a week.

The EIC is a refundable tax credit for working families earning less than \$23,370 with one or more children. The advanced EIC program allows employees who qualify for EIC payments to receive advance credits by filing form W-5, "Earned Income Credit Advance Payment Certificate," with their employer. The employer then gives the employee part of the advance credit in each paycheck — the IRS form will help you figure out how much. Only the basic credit for one child is payable in advance; employees can't collect early for credits for a second child, for a child born in 1992, or a health insurance credit. There is no additional expense involved.

For additional information, call your local IRS office and ask for IRS publication 15, Circular E, "Employer's Tax Guide." (For a toll-free number for the IRS, call 1-800-555-1212 and ask for the number for tax forms.) □

Milton Zall is a tax and legal consultant and writer in Silver Springs, Md.