

EIGHT-PENNY NEWS

VOLUME 13 • NUMBER 4

JANUARY 1995

New OSHA Standards for Fall Protection

Rules You Can Work With

After eight years of work, OSHA has finally produced a new fall protection standard for construction. According to the new rule, due to take effect in February, whenever workers are more than 6 feet off the ground, contractors must provide measures like guardrails, safety nets, lifelines, and body harnesses.

Builders have long objected that hassling with gadgets such as lifelines or safety nets complicates the job — and even increases the dangers. The surprise this time is that OSHA

agrees. Residential builders helped write the new OSHA rules, and residential job sites are treated as a special case. Home builders will not always need to provide physical fall protection.

In fact, OSHA even names some of the times when physical fall protection devices may not be the answer. The examples include joist placement, floor sheathing, exterior wall framing, rafter and truss placement, and roof sheathing. If, while activities like that are

continued



New OSHA regulations allow builders to substitute customized safety procedures when physical fall protection devices are impractical.

Spray Foam Producer Solves Ozone Problem

Manufacturers of rigid foam insulation board have successfully phased out the ozone-destroying chlorofluorocarbons (CFCs) once used as blowing agents, replacing them with hydro-chlorofluorocarbons (HCFCs). But the HCFCs aren't 100% ozone-friendly either, and the government plans to phase them out, too (*Eight-Penny News*, 11/93). The foam industry says finding a replacement for HCFCs in rigid foam panels could prove difficult.

In the meantime, though, there are already some ozone-safe foams for spray-on or injection applications. *Insealation*, a two-part expanding urethane foam with an in-place R-value of around 3.6, has been on the market since 1988. Also known as *Icynene*,

Insealation creates its own carbon-dioxide blowing agent in the chemical reaction between the two parts.

The latest ozone-friendly arrival is Supergreen, introduced in 1993 by Foam-Tech Inc. of North Thetford, Vt. Supergreen uses a hydrofluorocarbon, HFC-134a, as a blowing agent. HFCs contain no chlorine and have no effect on the ozone layer. Supergreen is available as either a urethane foam or a polyisocyanurate foam.

The injected foam expands to fill spaces and seal cracks, and it has an R-value of around 7 per inch. These properties make it ideal for certain situations, like sealing and insulating perimeter joist areas, or sealing around windows and

doors. One New England contractor told *JLC* he used the injected foam in a retrofit project on an old house whose thin walls had only a 2-inch space for insulation. The injected foam allowed him to preserve the original plaster while achieving an adequate wall R-value. The

foam also acts as an air barrier and vapor retarder.

R-value for R-value, injected foam is an expensive choice. How expensive depends on the job. But Supergreen developer Henri Fennell, president of Foam-Tech, insists that injected foam is cost-competitive

continued



Injection foams like Supergreen are most cost-effective when used to seal cracks as well as insulate.

STATE BY STATE

Massachusetts. The Northeast Sustainable Energy Association (NESEA) has picked a former railroad building in Greenfield, Mass., as the site for its new headquarters. The organization plans to construct a demonstration building which will use recycled construction materials, produce more energy than it consumes, and make the air and water leaving the building cleaner than the air and water it takes in.

New Hampshire. Changes in state rules will speed up the processing of permits to drain, fill, excavate, and build on or near wetlands. The new rules require the Wetlands Bureau to act on "minimum-impact" applications within thirty days. Larger projects classified as "minor" or "major" will still require a full review by the Wetlands Board. For information, call Katie Merriam at the Wetlands Bureau (603/271-2147).

Rhode Island. The Department of Environmental Management (DEM) has amended its rules for on-site septic systems to clarify DEM policies on test holes, field data, permits, requests for variances, and approval of new products. The amended regulations now allow dry-season water-table testing. For a copy of the new regs, call DEM at 401/277-2306.

Entrepreneur Turns Waste Into Profit

Depending on whose figures you believe, anywhere from a tenth to a quarter of the trash going into our dumps is construction and demolition debris, or "C&D waste." But according to Canadian Bob Zowatsky, much of what we call waste is actually a valuable resource. He should know: He's mining it to make a profit.

Zowatsky was in the remodeling business for ten years. "I kept the job site tidy," he says. "We cleaned up every day." One day, recalls Zowatsky, he asked his laborers why they kept taking fixtures he ripped out of old buildings away in their cars instead of putting them in the dumpster. "They were selling my trash for hundreds of dollars," he says. "I decided to open a new business."

Zowatsky and his four employees at the ReUze Building Centre in Scarborough, Ont., now spend their days collecting reusable items, displaying them in ReUze's warehouse/showroom, and selling them. In his third year in business, Zowatsky says he cleared \$60,000. That's after all expenses (including paying himself a decent salary).

In two years, he projects earnings of \$200,000.

To do that, Zowatsky has to watch his margins. He tracks every item that comes into the store and does a cost analysis to determine how much he's making. "If we're not going to make a dollar," he says, "we don't pick it up. We look for things that people want." Last year, customers paid an average of \$1,300 a ton for merchandise at ReUze — not bad for a product that Zowatsky got free at the curb.

Zowatsky comments, "I've cleaned out more contractors' garages than I can count." He

doesn't pay for anything he picks up. "Everything we sell was headed to the landfill," he points out. "I refuse to pay for somebody else's trash. If you want to take it to the dump, go ahead."

ReUze moves "big volumes" of doors, windows, kitchen and bath cabinets, and plumbing fixtures, according to Zowatsky. The best money-maker per ton? "Carpet tile," he notes. "It doesn't take up space."

Zowatsky enjoys his work. "If it ever stops being fun," he declares, "we'll quit doing it." He encourages other remodelers to try the salvage business: "It's a real hoot." □



The Ontario warehouse of ReUze Building Centre is crammed with valuable items reclaimed from demolition sites.

Virginia Pulls Plug on Home Owners Warranty Program

Insurance regulators in Virginia have taken over the operations of the Home Owners Warranty Corp. (HOW) and its parent company, Home Warranty Corp. (HWC). HOW was the largest insured home warranty business in the nation, insuring 1.7 million home warranties in 49 states from its base in Virginia. With the company now effectively out of business, builders who

relied on HOW are scrambling to find alternatives.

In closing HOW down, Virginia insurance commissioner Stephen Foster said that the HOW program was insolvent by at least \$45 million. A Virginia court appointed Foster deputy receiver for the troubled company. Under the court order, the company will not be allowed to pay claims or enroll new homes. Foster has the choice of finding investors to

rehabilitate HOW financially or liquidating the company.

The loss of HOW will have the biggest impact on builders whose customers are financing through HUD or Veterans Administration (VA) mortgage programs. Those agencies require homes to be enrolled in approved 10-year warranty programs. Otherwise, the agencies must inspect and approve each home three times during construction. □

Bugs Hitch a Ride on Foreign Logs

Timber companies faced with restrictions on logging in the U.S. have begun to cut and import logs from as far afield as Russia, New Zealand, and South America. But scientists are worried that log shipments from overseas may bring stowaways with them: insects and fungi with no natural enemies in North America.

The tiny passengers could pose a huge threat to domestic forests. For instance, government scientists fear that the nun moth, a native of European and Asian forests that feeds on conifer needles,

The Agriculture Department currently requires all foreign logs to be heat-treated or sprayed with pesticides before entering the country. But such efforts may be only partially effective. Bill Wallner, a USDA bug control expert, explains, "We simply don't have good mitigation procedures." And Max Ollieu adds, "We're really only talking about risk reduction. There's no way we're going to keep out 100% of the pests."

Imported pests have been known to devastate native trees. Early in the century,



Asian gypsy moth caterpillars and other pests traveling on imported logs could have a devastating effect on U.S. forests.

could reach our shores in a shipment of Russian logs. Set loose in the Northwest, the imported moths could chew up all the fir trees west of the Cascades, leaving nothing but hardwoods behind.

The timber industry says incoming logs can be kept clean. The industry has a strong incentive. A USDA study estimates the potential damage from the nun moth and other imported Russian pests at \$58 billion over 50 years. "If we got the nun moth in here and we couldn't eradicate it," says Max Ollieu, who heads a Forest Service team examining the problem in the Northwest, "it would have a terrible impact." Beyond the losses caused by the moth itself, says Ollieu, efforts to wipe the bug out could also cause unforeseen environmental damage.

Dutch Elm disease destroyed virtually every elm in the country. And the European gypsy moth, imported in the 1800s, has caused major damage in the U.S. In 1981, a peak year for moth damage, gypsy moth caterpillars defoliated 12 million acres of hardwoods.

The female European gypsy moth is flightless and spreads relatively slowly. But scientists are concerned about an Asian version of the gypsy moth, which does fly and consumes softwoods. The moth travels, not only on forest products, but in people's luggage. The Asian type has already been spotted in North Carolina: It arrived in ammunition boxes brought by troops returning from Germany. Scientists say they've controlled that infestation, but with increased world trade, more cases are likely. □

FROM WHAT WE GATHER

If you're thinking of saving money with steel framing, consider this possible hidden cost: According to November's *Builder* magazine, your carpenters might be redesignated as steel workers by your insurance company — and you might have to pay higher comp premiums. Your employees could be charged at the same rate as workers who walk girders on skyscrapers. In some states, comp premiums for steel workers go as high as \$150 per \$100 of wages, according to NAHB.

Here's a new twist on exhaust-only ventilation: A test system in Switzerland draws air into the building through roof insulation. The incoming air absorbs heat that would otherwise escape through the roof, theoretically cutting energy losses. Heat is also recovered from exhaust air with a heat pump. No data are available yet on the effectiveness of the experimental system.

Technicians who service or install air conditioning and refrigeration systems now need to be EPA-certified to recover and recycle refrigerants. To become certified, workers must pass an EPA-approved test. Uncertified individuals are no longer allowed to purchase CFC or HCFC refrigerant or install or repair refrigeration and air conditioning systems.

Should a lawyer who argues a fraudulent claim get to keep the legal fees? That's the question before the Montana Supreme Court in a fraudulent 1993 workers comp claim, according to the Coalition Against Insurance Fraud in Washington, D.C. The state workers comp court ordered an attorney to repay \$17,000 in fees he received for representing a man who faked injuries to receive disability pay. Trial attorneys argue that holding the lawyer responsible for the client's wrongdoing would have a chilling effect on lawyers accepting injured workers as clients.

Plywood and OSB prices hit a record high in November, according to the lumber market newsletter *Random Lengths*. The publication's structural panel composite price stood at \$428 per 1,000 board feet, surpassing by \$6 the record set in February 1993.

Log building is alive and well and living in Latvia, says Robert Chambers, editor of the *Log Building News*. Chambers says craftsmen in the Baltic nation, only recently freed from Russian occupation, have revived the traditional craft using plentiful native spruce and pine. Chambers hopes to bring Latvian workers to the U.S. for an exchange of skills, and invites interested employers to contact him (*Log Building News*, N8203 1130th Street, River Falls, WI 54022; 715/425-1739).

Feds Remodel Financing Tool

Financing a small remodeling job has gotten easier recently, thanks to changes in the federal loan-guarantee program known as HUD Title I. The Housing and Urban Development Agency (HUD) has relaxed equity requirements and raised loan limits for the program, so that homeowners can now borrow up to \$25,000 with no money down and no equity in the home. Jobs up to \$7,500 can be financed with an unsecured loan.

The revamped HUD program makes it easier for remodelers to sell jobs to customers

who don't have savings, equity in their home, or good credit. That opens up a big market of potential customers, such as young couples with children.

Some larger remodeling companies have been approved as lenders by HUD. These companies can offer financing as a product, selling their jobs based on the monthly payment instead of the bottom line.

But small companies who don't have the net worth to qualify as HUD-approved lenders can still use Title I financing, says Van Calhoun of Statewide Funding Corp., in Clifton Park, N.J. Calhoun was

a remodeler for 15 years before becoming a banker. He advises remodelers to shop around for a finance company that has experience financing small remodeling jobs under Title I. Clients who have a problem with a job's price, says Calhoun, might find the monthly payments on a HUD-financed loan surprisingly affordable.

Fellow banker Wayne Beale, also of Statewide, said that in today's economy, banks have large quantities of cash to lend and are looking for ways to invest it. "Many banks are willing to lend to people with

imperfect credit," he said. On a loan of \$25,000, says Beale, a finance officer could earn a commission of \$400 or so — enough to make it worth his while to explain the financing to the homeowner and handle the red tape involved in a HUD loan.

For a list of HUD-approved lenders in your area, contact the nearest office of Housing and Urban Development (listed in the phone book under U. S. Government). Or call the Title I Home Improvement Lenders Assoc., in Washington, D.C.; 202/328-9171. □

OSHA, *continued*

going on, harnesses, ropes, guardrails, and such would be impractical or make the job site more dangerous, contractors won't have to use them.

That's the easy part. Here's the hard part: Builders *do* have to follow safe work procedures whenever there's a possible fall hazard on the job. In fact, to comply with the rule, a builder must have a written safety plan for each job site. The plan must explain exactly why physical fall protection devices would be unsafe or unworkable, and tell exactly what procedures the crew will follow to reduce fall hazards during dangerous phases of the job. And at each site, one responsible person must be charged with implementing the plan.

Areas on the job where there's a risk of falling, but no fall protection is provided, will have to be clearly marked as "controlled access zones." Only trained people can enter the zone: No more sending new helpers up onto second-story wall plates.

How much will the new rule cost builders, and how effective

will it be at increasing safety? The answer probably depends on how OSHA chooses to enforce the new rule, and how builders choose to comply with it. Tim McDougal, safety director at Richmond Homes in Denver, Colo., says that if the new organizational requirements are enforced strictly, the cost could be burdensome. "They're asking us to have safety monitors," he said. "We have a responsible person on every job, but having a monitor at every site would be infeasible."

Paperwork for the new rule could also be a major headache, said McDougal. "[Technically], we would have to have about 400 different [written] compliances for each of our models," he said. "We may end up having to do it."

But OSHA may not be focusing on technicalities this time around. Denver-area builders, for example, have been dealing with stepped-up OSHA enforcement of fall protection for over a year, and so far, OSHA and the builders have been able to reach an understanding (*Eight-Penny News*, 5/94). Denver builders

played a big part in formulating OSHA's flexible new rule, and the Denver OSHA office has taken a practical approach to job-site safety. Tim McDougal says Denver OSHA director Bart Chadwick talks to builders often. "Bart comes to meetings and says, 'Hey, we are willing to work with you,'" explains McDougal. "I know I can call Bart if there is a problem."

Cooperation has worked, McDougal notes: "The accidents have really decreased. There has not been a death in a couple of years."

On the other hand, OSHA officials have made it clear that they don't care how much it costs to comply with the rules. But Chadwick says that improved safety will actually save builders money by lowering their workers compensation costs. And McDougal confirms that in Denver, the safety push has cut some costs. "I've had reports that our framers have cut compensation costs," said McDougal. "And it's not just the comp. When you have people working instead of sitting at home with a broken ankle, you're saving money." □

Foam, *continued*

even for insulating walls in new construction. The high cost per R is offset by a higher R-value per inch, he claims, which enables the builder to frame with 2x4s instead of 2x6s and to forgo jamb extensions. And by using injected foam, says Fennell, the builder can eliminate housewrap and poly vapor retarders.

A builder we spoke to wasn't so sure about using injected foam for insulating new walls, saying, "I ran the numbers and found out I could get the R-values I wanted more cheaply with fiberglass." He recommends the foam for retrofits, but he cautions that cleanup is a concern: "It's sloppy. I wouldn't bring it into someone's living room."

Foam-Tech installs injected and spray-on foam all over New England. For customers outside New England, Fennell says he has shipped his product as far away as Arizona, but he says the installer has to know how to use it.

For information, contact Foam-Tech Inc., Rt. 5, North Thetford, VT 05054; 802/333-4333. □