

Eight-Penny News

VOLUME 7 • NUMBER 8 • MAY 1989

OSHA Issues Wood Dust Level Regulations

On January 13, 1989, OSHA published regulations covering 400 materials in the workplace, including wood dust. The regulation of wood dust levels will have particular impact on the cabinet industry. Wood dust levels will be regulated at 5-milligrams per cubic meter for both hardwoods and softwoods for an eight-hour time-weighted average and 10-milligrams per cubic meter for short-term exposure of 15 minutes.

These levels closely resemble the recommendations presented to OSHA by the Inter-Industry Wood-Dust Coordinating Committee, a group of 58 wood-industry associations and companies. The group financed scientific, economic, and legal

studies and presented their findings to OSHA.

"The final regulation is tough and will impose significant economic and regulatory burdens on cabinet manufacturers. However, it is much more realistic than OSHA's original proposal of 1-milligram per cubic meter. Most small cabinet manufacturers would have been forced to cease operations if our efforts had not been successful," National Kitchen Cabinet Association Executive Vice President Dick Titus pointed out.

"OSHA's final regulation," Titus added, "provides a much more realistic timetable in which to achieve compliance, stretching as far as December 30, 1992." ■

A Patriotic Paint Job

The view from the White House isn't what it used to be. Instead of expansive lawns and lush gardens, the Bush family looks out over dirty drop cloths and crumbled bits of sandstone. That is, when the family can see out the windows.

The exterior restoration that started under the Carter administration and continued through the Reagan era promises to forge ahead during what will one day be known as the Bush years.

Since 1980, workers commissioned by the National Park Service have chipped and scraped at the more than 28 coats of white paint adorning the porous old Aquia Creek sandstone.

A safe method of chemical paint removal using a high-pressure water spray was developed for the project. A new type of Latex paint that is supposed to be more durable has been applied to the stripped areas.

More than three years were spent researching paints and removal systems, says Rex W. Scouten, curator of the White

House. But the results are useful for restorationists in the United States and overseas.

"It seems no matter where you go, most public buildings are stone," he says.

Probably the most difficult job was stripping paint from the intricately carved north portico. Workers resorted to tiny brushes and ice picks to pry the paint from the delicate carvings.

While the job is more than half done, Scouten says workers who will have to rush to get the exterior completely renovated in time for the 200th anniversary of the laying of the cornerstone in 1992. For technical information on the project, including specifications and materials used, contact Associate Regional Director, White House Liaison, National Service, 1100 Ohio Drive, SW, Washington, D.C. 20242.

Incidentally, in case you ever wondered, the White House is white because that was the color of the original sealer painted over the sandstone in 1797.

— Wendy Talarico

Build A Better Stair

If researchers at Georgia Institute of Technology are successful, builders may soon have to go back to stair-building school. Georgia Tech's School of Architecture is studying what happens when people fall down stairs. Volunteers will dress up in padded suits and be hooked to

parachute harnesses. Stairs will collapse unexpectedly, making the victim fall. Researchers will film the fall and study ways to improve stair design. Improved stair design could be useful to senior citizens or disabled people who could be injured during a fall. ■



When East Coast Lumber's own Zeke Levis delivered an order of lumber to a job site in East Hampstead, N.H., he did it the old fashioned way... by horse team and wagon.

IRS Ruling to Affect Home Associations

An IRS ruling in the case of a single Connecticut condominium association will have a widespread effect on "countless other groups in other states, according to an article in the New Haven Register (11/5/88)."

Under state law, property owners can form tax districts that allow them to share common costs, such as road maintenance, fire services, and roadway lighting. In Connecticut, there are many such tax districts, particularly along the southern "gold coast." Some property owners participating in these tax districts have taken property tax deductions on their federal income tax returns, but the IRS ruled that not all of these deductions are legal. The IRS is particularly disapproving

deductions for insufficient services. An example would be where, because the tax district did not provide complete and sufficient fire service, a nearby municipality would have to take up the slack. In such a case the tax district would not be truly acting as an independent municipality – and should not be eligible for tax exemptions. As a result of the ruling, Connecticut State's Advisory Committee on Intergovernmental Relations is reexamining the state's laws governing the creation of these tax districts. Questions regarding the establishment of new (and tighter) rules of accounting for the districts have led to worries that this type of association will be less beneficial. ■

Northeast Metro Market to Continue Slowdown

"The picture in the Northeast is for a continued but moderate slowdown," according to the most recent "Metro Forecast" in Housing Economics (published by the National Association of Home Builders, Washington, D.C.). The report cites high housing costs, overbuilt markets, and downturns in economic growth. Starts in New York state metro areas are expected to decline by 22 and 9 percent in 1988 and 1989, respectively. Multi-family construction will suffer the most. In the large New York CMSA (Consolidated Metropolitan Statistical Area),

which includes northern N.J., Long Island, and southern Connecticut, as well as N.Y.C., housing starts will drop by 30 percent from 66,000 in 1987 to about 46,000 in 1989. Both single and multi-family will share in the decline. But in the Philadelphia, Pittsburgh, Buffalo, and Rochester metropolitan areas, only a moderate housing slowdown is expected because of good employment and income gains.

For more information, contact the publishers of Housing Economics, NAHB, 15th and M Streets, N.W. Washington, D.C. 20005. ■

FROM WHAT WE GATHER

Americans spend over one hundred billion – that's billion – dollars to remodel their homes in 1988. That's double the expenditure in 1983, making it the fastest growing sector of the construction industry – according to the NAHB Remodelers Council.

You should hold onto building permits for 10 years, according to a report in Constructor. Other recommendations for record storage are income tax returns: 8 years; accepted bids: 10 years; rejected bids: 2 years; accounts payable and receivable: 7 years; invoices: 7 years; insurance records and claims: forever.

Wood siding materials – including hardboard, plywood and solid wood – are used as exterior siding more than three times as often as bricks, the next most popular siding material. Source: The American Hardboard Association.

The most bang for your customer's remodeling buck is a kitchen remodel, adding a bathroom to a one-bath house, or adding a fireplace – according to a recent survey in Remodeling magazine. Kitchen remodels, which ranked highest, return to homeowners an average of 84 percent of their cost upon resale.

Age of Specialization

Yet another new classification — C-14 — has been established by the California Contractor's State License Board. This one is for the installation of metal roofs. General contractors who are currently installing or repairing metal roofs, and even licensed roofing contractors (C-39) and sheet metal contractors (C-43), are now required to obtain this

specialty license in order to continue their work in this area. Requirements for the license include documenting four years of metal roofing experience, passing the State exam, and posting a bond.

Fire protection installation will also be limited to contractors holding a specialty license in this area as of January 1, 1990. ■

Roofer Finds It's Better to Explain

After many years in the roofing trade, we found it better to let the customers know what to expect before misunderstandings arise. We started with little clauses attached to our regular contracts. But eventually these items were pulled together and written up as our "Customer Expectation List."

We picked our words carefully...since we didn't want to worry our customers about our ability to do a professional job. After much deliberation we decided to begin with an opening statement:

"If you are like most of our customers, this is probably your first experience with reroofing, and you are wondering what to expect. The most important point to be aware of is: There is no way that we can reroof your home without creating some inconvenience and disrupting your normal routine. The following items are offered to prevent misunderstanding and irritation after the job starts. Please read carefully..."

In the printed document, potential problem areas are itemized and introduced with the question, "Did I remember to tell you that..." Following this we cover items point by point, keeping the language friendly.

To begin with, we tell them we will be placing a sign on their property, and why (for advertising). This gives the customer a chance to object. (Incidentally, we've never been refused.)

Next we warn them that if there are low-hanging branches over the roof, some trimming will be necessary. We let them know that we'll only cut back what is necessary to do an "efficient, workmanlike job." This gives them a chance to trim the tree professionally, before we begin the job.

After some hard lessons, we decided to include a suggestion that the client check all light fixtures, pictures, and mirrors to make sure they are secure. In one case, the vibrations caused by workers on the roof led to the destruction of a "sand-cast-in-cement, sea-shell-driftwood, 2x4-foot wall hanging" perched precariously on two small finishing nails on a bathroom wall and the antique toilet below it. Neither could be replaced. We also found that we had to limit our liability as far as antennas were concerned. We agree to remove and reinstall antennas up to 20 feet in height. But we are not responsible for physical damage or poor reception of the replaced unit.

Other items include recommendations for protection and

details about who's responsible for cleaning up what; and warnings that additional work such as repairing defective chimney flashing, creating access not easily available, or removing and replacing solar panels would cost more than the original contract price. We also let them know that when one roof is installed over another, new flashings are sometimes installed at the vertical sidewall projections, and that these flashings will be covered by 1x4-inch board that will not be painted.

Finally, we let them know that any excess materials are ours.

Seeking acknowledgement. Our first thought was to send the list along with the original proposal/contract. But we finally decided that this method wouldn't let us know if the customer accepted the terms we had spelled out. So we decided to send customers our "Expectation List" as an acknowledgement that we had received their contracts. We then ask customers to acknowledge their receipt of the list, and at that time, we give them a tentative date for the work to begin.

We've been using this method for six years, and it's worked well for us. Over the years, we've updated the list, but the basic form remains the same. In the end, we feel we've created fewer misunderstandings, and better customer relations. ■

The above is an adaptation of an article by Lorne Memmott, president of Modern Method Roofing Company, in Napa, Calif., which originally appeared in Roofing, a publication of the National Roofing Contractor's Association, O'Hare Centre, 6250 River Road, Rosemont, IL 60018; 312/318-6772.

Roofing Hotline

If you're looking for a professional local roofing contractor, you can call 1-800-USA-ROOF. The National Roofing Contractors Association runs the free hotline for specifiers, architects and builders. If you call, they'll send a computerized list of NRCA members in your area to contact. ■

G.E. Testing Plastics in Construction

General Electric Plastics has broken ground on a "Living Environment" house, which is designed to test new uses for plastics in home construction. Research and construction costs are already \$4 million. The house, being built in Pittsfield, Mass., will be completed in September, 1989.

The G.E. Plastics' house will put a number of new ideas to the test — helping GE figure out how various plastic components and systems behave in a real household. Applications include roofing structures, interior wall panels, and basement and floor structures.

The house will be outfitted with an integrated hvac system dubbed the "Total Environment Control System" or TEC. The system will provide four functions: air conditioning, water conditioning, energy management, and electrical and gas control.

The TEC system takes in outside air, filters dust, and adjusts humidity. It also filters, conditions, and heats water. At the same time, GE claims, heat exchangers will reclaim heat from hot water and flue gases for reuse.

With Steven Winters Associ-

ates of New York City, GE has designed radiant-wall panels that, they claim, will eliminate the need for traditional radiators and perform a number of functions, including heating, cooling, dividing space, and providing service distribution.

The wall will consist of a three-layer laminated panel with a glass-reinforced thermoplastic skin surrounding a low-density foam core. Vertical channels in the core are fire-resistant and will house water and gas pipes as well as electrical wires. According to GE, initial analyses indicate the radiant panel will perform more efficiently than forced-hot-air systems. Within the building, certain walls (called "option walls") can move to create spaces, such as an office or TV room.

The basement walls will be made of precast concrete panels. On the inside, foam panels will insulate and provide a durable finish surface. The precast walls can be made in any length and have molded-in channels for utility lines.

Roof panels are load-bearing and similarly composed of the thermoplastic-sandwich construc-

tion. The flooring systems consist of traditional joists and subfloor combined with plastic components.

Ultimately GE wants to produce all of these plastic house parts in factories, on automated assembly lines.

"We are not out to replace [traditional building] materials, which, of course, will still have a strong place in building," says Uwe S. Wascher, vice-president and general manager of marketing. "In fact, Wascher claims, 'when you enter our high-performance living environment, you probably won't see any plastic at all. You won't see futuristic or far-out shapes. You'll see productive, affordable, well-designed living spaces.'"

GE Plastics predicts accelerated growth in the use of plastics in the building and construction industry over the next decade and well into the next century. The market for high-strength plastic materials in the building and construction industry is, they estimate, potentially huge — exceeding a billion pounds per year.

— John Wagner



This scale model of GE's concept house is all-plastic. The real thing, under construction in Mass., will feature plastic roof and wall panels and an integrated hvac system.

Contractor Fraud May Invalidate a Mechanic's Lien

One of the great protections afforded laborers and suppliers is the mechanic's lien. A mechanic's lien allows persons who have made improvements to a piece of property to have a security interest in that property until they are paid for their work. The purpose of this law is to prevent the unjust enrichment of property owners at the expense of a contractor, laborer, or material supplier.

Despite the general policy favoring payment of contractors and labor or material suppliers, a mechanic's lien will not be enforced when a contractor or subcontractor has committed fraud against a property owner. A person who commits fraud, such as embezzling funds or tricking an owner into making higher payments, has "unclean hands," and may be barred from foreclosing

on a mechanic's lien.

In *Burton v. Sosinsky*, the California Court of Appeals refused to foreclose a subcontractor's mechanic's lien. The subcontractor had participated with his general contractor in overbilling a property owner for work the subcontractor had performed.

Burton was a subcontractor hired to pave a parking lot owned by Sosinsky; he also made improvements on another piece of Sosinsky's property. The general contractor overbilled Sosinsky and diverted the money received to other projects. Part of the overbilling was accomplished by increasing Burton's billing. When payments were made by joint checks to Burton and the general contractor, Burton gave the overage to the general.

After a dispute with Sosinsky concerning the parties' payment

arrangement, Burton stopped performance on the contract and moved to foreclose on his mechanic's lien.

Although Burton alleged that he did not directly profit from the general contractor's fraud, he had a long history of working with the contractor and wished to continue working for him in the future. As a participant in the scheme to defraud Sosinsky, Burton had "unclean hands," which could prevent him from enforcing the lien.

In addition to the statutory lien law, principles of justice and fairness were applied by the Burton court in deciding the case. Since the lien notice was misled, Burton's mechanic's lien was determined to be invalid. ■ Sam K. Abdulaziz, Law Offices of Abdulaziz & Grossbart, North Hollywood, Calif.

Report Says Low-Sloped Roofs Should Get Cool Treatment

In most cases, cooling a roof down with a white surfacing material will save more than it will cost in increased heating costs. According to "Guide for Estimating the Effect of Surface Solar Reflectance and Surface Mass on the Thermal Performance of Low-Sloped Roof Systems," a report recently released by the U.S. Department of Energy, black roof membranes routinely exceed 160°F on summer days, whereas flat-white

surfaces usually don't exceed 135°F, and white glazed surfaces seldom go above 120°F. The report does not offer a blanket endorsement of high solar reflectance roofs, however, and cautions that other factors should be considered, such as roof maintenance costs and durability. For a copy of the report contact the Oak Ridge National Laboratory, P.O. Box 20008, Building 3147, MS 6070, Oak Ridge, TN 37831-6070. ■

Plywood and Hardboard Top All Others in Siding Stats

As measured by the American Hardboard Association in millions of square feet on a surface basis, U.S. builders chose manufactured wood products – plywood and hardboard – for exterior siding nearly half the time in 1987 (the last statistical complete year).

Plywood led with 1,407,692 million square feet and hardboard was second with 982,237.

Brick came in a close third with 939,200; with vinyl just behind at 910,000. Wood siding (cedar and redwood) at 367,480 and aluminum siding at 360,000 trailed further.

The respective market shares of these materials have not changed drastically in the last ten years, although plywood took the lead from hardboard in 1984 and has increased its lead each year since. ■

Tax Talk:

Tips For Easing the Tax Burden On The Self-Employed

Whether you are self-employed full time or moonlighting, you face a special challenge – keeping your business affairs separate from your personal activities. Here's a fact you must burn into your memory: The IRS has statistics showing that self-employed individuals, who are not incorporated, are among those most likely to underreport income and overstate deductions. Here are some tips for avoiding trouble with the IRS:

Use separate bank accounts and credit cards. This will greatly simplify the task of keeping accurate business records. Some crossover will inevitably occur between your business and personal accounts, but if you keep it to a minimum and document the flow of funds between the accounts, you can head off an IRS search for additional business income.

Keep records according to the line items on Schedule C of Form 1040. For each item of expense or income in your business books, record the line number of Schedule C where the item must be reported. This

easy-to-work-with system does wonders for a simple business operation. However, the more complex or active your business becomes, the more you will benefit from having a good accountant set up your record-keeping system.

Document your personal sources of funds. If you're living a high lifestyle and reporting little or no business income, you can bet the IRS will ask, "How do you pay for all this?" So, if you receive money from non-taxable sources, you'd better be able to prove it, or the IRS may conclude it's additional taxable income. One more point: Document your personal expenses. If the IRS thinks you spend more than you really do, they'll start an all-out search for unreported income. But if you keep track of your personal expenses, you may be able to stop an IRS witch hunt in its tracks. ■

Irving Blackman, CPA, J.D., is with Blackman, Kallick, Bartlestein, Chicago, Ill. He specializes in closely held businesses.

Tips for Keeping Concrete Cozy

In the U.S. it's not rare to find massive concrete-basement walls, basement floors, or slabs-on-grade foundations, all topped by light wood frame construction. This can lead to some interesting heating problems. Jon Eakes, our Canadian correspondent explains why, and he provides some inexpensive tips on how to solve them.

Eakes says, "difference in response time between massive and lightweight surfaces – along with the common habit of poorly insulating concrete – can cause uncomfortable basements or cold floors with slabs-on-grade."

"Wherever you have a wall or floor surface that is simply a bit of wood or drywall followed by thermal insulation, that surface will heat and cool rather quickly with changes in indoor air temperatures during cold weather. But a surface that is massive concrete has a large thermal mass and it takes much longer for it to respond to changes in the room's temperature. If there is little or no insulation on the cold side of that concrete, it is even slower to respond to the indoor air's effort to warm it up. (When a concrete wall is heavily insulated on the inside and then covered with a thin layer of drywall, the inside-wall surface cools and warms as quickly as the rest of the walls. It now responds to the heating system as if it were lightweight construction.)

"When a slab-on-grade addition is heated with the same system as the rest of the house, the addition is always out of phase, from a comfort standpoint, with the rest of the house. This is true in an even more exaggerated form when a single-forced air-heating system is used to heat both the main floor of a house and a basement apartment. If the thermostat is upstairs, the basement renters freeze. If the thermostat is in the basement, the house above is roasted. The problem is not necessarily that one needs more heat than the other – that can be balanced out with the dampers. The problem is that one area cycles at a different rhythm than the other.

"The obvious solution is separate heating systems – zone heating. There is, however, a very simple and economical way to solve the problem. For a slab-on-grade, the greatest comfort is achieved with ceiling radiant panels. They quickly heat the room surface of the slab with changes in ambient air temperature. In fact, they are quicker than heating units embedded into the slab. They are also more effective for a horizontal floor surface than baseboard heaters, which essentially heat the walls above them. Unfortunately ceiling radiant panels cost more to install.

"Electricity is expensive you say. Right. But the radiant heaters should be used for sec-

ondary heat, with the primary heat coming from the central furnace. The effort of running a heating duct pays off not only in low-heating costs, but it helps to circulate the air in the addition with the rest of the house – something that no radiant or baseboard system does adequately.

"A similar solution can be used to keep a basement apartment comfortable. Put the thermostat upstairs; the basement heat will lag behind the house. Now, in the coldest reaches of the basement, generally far from the furnace, add a few small baseboard electric heaters. I prefer 500-watt heaters, or even better yet two heaters in series to cut down on the high temperature output. These will have their own wall-mounted thermostat – preferably rapid-response electronic thermostats and not a full line-voltage thermostat. Lowering the temperature of the electric heaters will avoid hot surges, and using a fast-response thermostat will keep the thermal mass at an even temperature.

"Keep good air circulation throughout the house and smooth out thermal-lag comfort problems with quick-responding electrical systems. Our mixed lightweight/massive construction systems can be as comfortable in one room as in another, and you can keep it economical."

— Jon Eakes

Computer Bits:



Boston architects with CADD questions... can write to the Boston Society of Architects' newsletter computer columnist, Michael Hogan at WFA, 171 Milk Street, Boston, MA 02119. Or get in touch by modem (300 or 1,200 baud) at 617/666-0973.

Comfortable computer stations... for the truly committed are listed in Heartbeat Computer Space catalogs. For a look at the company's ergonomic designs contact Heartbeat at 12501 Gladstone #B2, Sylmar, CA 91342; 818/898-1198.

If you want to be convinced... the Software Shop will send you "Twelve Ways You Can Profit From a Computer for Construction." Software Shop Systems, Inc. is at P.O. Box 728, Farmingdale, NJ 07727-0728; 800/554-9865 (201/938-3200 in N.J.).

If your clients need to be convinced... you can show them their lot fully landscaped before you even break ground with "New Image Design System." Makes a videotape or color printout with optional printer. For more info, landscape and architectural designers can contact New Industries, Inc. 21218 Vanowen St., Canoga Park, CA 91303; 818/702-0285.

Lists at your bidding...with "Bid Lister," an Apple/MAC based program that promises to help you organize your bidders. Contact Software Constructors, Inc., 2416 Hillsboro Road, Nashville, TN 37212; 615/383-4850. ■