EIGHT-PENNY NEWS

VOLUME 10 • NUMBER 4

JANUARY 1999

Codes Okay Wider Doors, Longer Stairs

Persons with disabilities will have an easier time navigating homes built to comply with new regulations recently passed by Building Officials and Code Administrators' (BOCA) and Southern construction supervisor for the National Association of Home Builders (NAHB), is to allow wheelchairs to pass more easily through doors and to make stairs easier to climb for elderly and disabled people. But both regulations will boost the costs of home construction. The 7-11 requirement adds up to 4 feet, 9 inches to the length of code-approved stairs, while the wider doors will mean



Stairs will have to be longer under new BOCA code provisions requiring a minimum 11-inch tread and a maximum 7-inch rise. BOCA and other code bodies also had major votes on doorway width, fire sprinklers, and energy issues.

Building Code Congress International (SBCCI). Last fall, both groups approved proposals to require 32-inch clear width passage doors. BOCA also passed a provision requiring that stairs have a maximum 7-inch rise and a minimum 11-inch tread. The "7-11" requirement also prohibits open risers.

The purpose of the changes, according to Dan Johnson, senior codes and

wider halls, increasing the area of small homes by about 11%.

"You have to draw the line somewhere on affordability," says Johnson. "You start passing these kinds of regulations and the costs start inching up. Complying is no problem in bigger homes. But every bit of space counts in a smaller home."

continued

Vermont Subs Win Prompt Pay Bill

Subs should start getting paid more quickly in Vermont since a new "prompt-pay" law took effect January 1, 1992.

The legislation requires that:

- The building owner must pay the general contractor within 20 days of billing for any work completed, unless the contract specifies otherwise.
- The contractor must tell subcontractors what the payment arrangement with the owner is; and must in any case pay subcontractors within seven days of being paid by the owner.
- Any late payments to subcontractors will be subject to a late fee of 1% interest per month, as well as any legal fees incurred

by the sub in collecting withheld payments.

The law answered the complaints of subcontractors who felt that the previous lack of regulation allowed owners and contractors too much time in paying for work that was satisfactorily completed. The Vermont Subcontractors Association said subs typically waited six months for payment, even though contractors got paid after two months on average.

The Vermont bill was the fourth state prompt-pay legislation to pass in the last few months. Florida, New Jersey, and North Carolina all recently passed similar legislation under pressure from subcontractor organizations. □

Cutting Workers Comp Costs

Workers compensation expenses can total as much as 20% of a contractor's direct labor costs. To reduce injuries and expenses, the American Subcontractors Association recommends the following steps:

- Assign someone within the company to communicate with the employee or the employee's family when an injury occurs.
- Get the injured worker back on the job in some capacity as quickly as possible.
- Always maintain proper, accurate injury reports.
- Educate and inform employees about workers comp benefits.
- Seek competitive quotes from insurance carriers at least 90 days prior to your renewal date.
- Make sure employees are classified appropriately, and use multiple classifications by job duty where applicable.
- Review your claims periodically, paying special attention

to the claims reserve at least four months prior to renewal/expiration.

- Educate foremen and lead carpenters on handling injuries and procedures for reporting them, including proper documentation.
- Appoint a safety officer and have a written safety program.
- Establish a company-wide safety incentive program and encourage its use through a reward system.
- Question and change when possible any contract language that shifts liability to you.
- Maintain accurate employee, insurance, and safety records, and be prepared for an insurance company audit.
- Provide input in state workers compensation reviews that determine rate increases as well as classification procedures.

Reprinted in part with permission from Contractor magazine.

STATE BY STATE

California: Residents of Half Moon Bay, a small coastal town near San Francisco, voted overwhelmingly to restrict population growth to 3% per year by putting an annual limit on the number of homes and apartments that can be built there.

Meanwhile, though the drought has eased, Southern California builders are asking legislators to require residential and commercial building owners to install 1.6 gallonsper-flush (gpf) water closets before selling an existing building. According to a spokesperson for the Building Industry Association of Southern California, the move would quadruple water savings over what would be achieved with the impending state law that, as of January 1, requires 1.6-gpf closets only in new construction. This would free more water for new housing.

New Jersey: Design/builders are promoting a statewide bill that would amend the current architecture licensing law to allow any builder or contractor to provide design consulting services. The state's board of architects contends that the word "design" may be used only by licensed architects in company names and in the advertisement of business services; the issue has been the source of many court actions in the state in recent

New Jersey also joined Vermont, North Carolina, and Florida in passing "prompt-pay" legislation requiring contractors to pay their subcontractors within a month or less.

Minnesota: Contractors' bids must now include itemized costs for worker's compensation and unemployment compensation.

Maine: Employers must now grant employees up to 18 weeks of family medical leave, and must maintain benefits during that time.

Ohio has a similar law affecting employers with over 25 employees. □

Iggy Joins Pink, Jethro in Brick Hall of Fame

You've probably heard of the Rock and Roll Hall of Fame. But how about the National Association of Brick Distributors (NABD) Hall of Fame? This gutsy trade group went head to head with MTV by staging the Brick Video Awards last October in New York City. Among the categories: Best Rap Brick Video, Best Alternative

Brick Video, and, of course, Brick Video of the Year. In that final category the winner was Iggy Pop, that profane, cult rock star, for his album, "Brick by Brick." Pop joins such other NABD Hall of Famers as Pink Floyd (for "The Wall"), the Commodores (for "Brick House"), and Jethro Tull (for "Thick as a Brick"). □

From What We Gather

Seven out of ten construction businesses gross less than \$500,000 a year, according to recent national statistics.

Banks are more than twice as likely to deny a mortgage to a black American as they are to a white American. even in upper income brackets, a recent federal study of over five million mortgage applications found. Over 23% of median-income blacks applying for mortgages were denied, compared to 9.5% for whites. Blacks with more than 120% of their area's median income were still denied 21% of the time; only 8.6% of whites at that bracket failed to get loans. The study found similar inequities at lower income brackets.

Decks sell homes, according to a recent survey of more than 300 real estate professionals. Decks are also a good investment. Nationally, they earn an average 71% payback.

Housing starts fell 11%, while multifamily unit starts declined a drastic 46% during the first three quarters of 1991, compared to the same period in 1990, according to the National Association of Home Builders.

Unfaced rigid foam sheathing was used in 22% of U.S. homes in 1988, up from 7% in 1976. Foil-faced foam board was used in 17%, up from near zero in 1976.

Owners of commercial buildings will spend more than \$57 billion nationally on remodeling in 1992, according to Buildings magazine. About 83% say their renovation plans involve measures to reduce energy consumption. Another 73% say they are being forced to add sprinklers and take other steps to meet revised fire codes.

A 4% base increase in the price of sheet steel is increasing prices of tools, hardware, ductwork, and other construction-related products, according to the Sheet Metal and Air Conditioning Contractors' National Association. The high cost of steel is due to low inventories coupled with increased demand for the material.

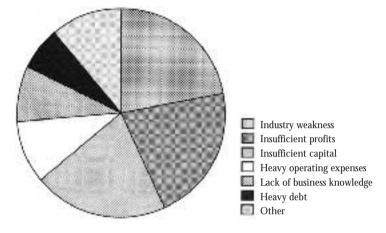
NKBA Certifies Cabinet Installers

Remodelers who install kitchen cabinetry will soon be eligible for a new certification from the National Kitchen and Bath Association (NKBA). To earn the Certified Professional Installer (CPI) designation, remodelers will be required to take a training course and pass written and practical examinations, says Ellen Cheever, director of educational services for the NKBA.

Installing cabinetry is not as easy as it might seem, says Cheever. Getting everything straight, level, and plumb can be tough. "We have cabinetry manufacturers tell us they are constantly getting products back that [have] been damaged. And designers tell us the cabinets they spec aren't plumb and level," she says.

The testing program, and accompanying texts, are expected to be ready later this year. Training will be offered around the United States by the NKBA. □

Why Construction Firms Failed in '90



Source: Dun and Bradstreet

Newsletter Offers Help For Healthy Home Builders

The average home contains more than 500 chemicals, many of which are suspected carcinogens. These pose a hazard not only to the people who live in these homes, but also to the craftsmen who build them. While there are plenty of books on the subject, the science of healthy home building is constantly changing as new research is completed and new products come on the market.

With this in mind, a new bi-monthly newsletter, "Building with Nature," will attempt to keep builders informed about things like indoor air quality, energy efficiency, and building with healthy products. For more information, write P.O. Box 369, Gualala, CA 95445; subscription cost is \$45 per year. □

Lead Debate Rages On

Dealing with lead based paint is likely to grow more complex as more states legislate what remodelers must do when they encounter the material. About 30 states have no regulations at all, but many are scrambling to put programs in place. Most of these are modeled after the Massachusetts and Maryland regulations that have specified lead abatement procedures for several years.

Administering these programs is expensive, says Brett Diggs, research assistant for the National Association of Home Builders (NAHB). In most states with regulations, if a child is found to have an elevated blood lead level associated with lead paint in the home, the paint must be abated. "How many people can afford to pay thousands of dollars to have the paint in their house abated? And who's going to cover that cost if the homeowner can't?" Diggs says.

Connecticut is one of the first states attempting to set up a financial assistance program to pay for abatement. "But most states don't have a lot of money kicking around for this sort of thing," Diggs says.

Here are some of the recent lead-related developments from around the country:

- As of January 1, 1993, blood lead level tests will be required for all children entering daycare or kindergarten in Illinois. If high lead levels are detected, the health department may test the home and require abatement. These requirements were reduced dramatically over what was initially proposed, says Michael Markstahler, a remodeler and a member of the state home builders association's legislative committee. "The original intent was to clear all housing in the state of lead within 10 to 15 years," he says. The legislation was amended because of the associated high costs.
- Rhode Island is one of the most recent states to develop a comprehensive lead program. The state mandates testing of children in high-

- risk areas and inspections of the homes of children with high blood lead levels. If lead contamination is found in these homes, abatement is required.
- The federal Centers for
 Disease Control (CDC) have
 lowered the "threshold of
 concern" for lead levels in
 blood from 25 micrograms
 per deciliter to 10. Under
 these new guidelines, the
 number of children considered endangered by lead
 poisoning could grow twelvefold. The CDC is also urging
 that efforts be taken to reduce
 lead in the home.
- The Occupational Safety and Health Administration (OSHA) is working with the NAHB to measure airborne lead dust levels generated during remodeling activities, and is expected to release a construction industry standard for lead this spring. Preliminary reports have found that many abatement activities, such as removing moldings and doors, do not generate high amounts of lead dust, says Dick Morris, senior technical adviser for

the NAHB. "We need to find out which activities are most dangerous so we can protect construction workers," he says. Lead abatement is an expensive job since, in many states, those doing the work must pay to have their workers trained and certified. They must also buy special equipment, such as high efficiency particle accumulator (HEPA) vacuums and respirators, and they must pay to have their workers' blood lead levels tested periodically. "It isn't right to go to all this trouble if there really isn't any danger in some of these activities," Morris says.

 The National Association of Home Builders (NAHB) is putting together a compendium of lead based paint programs administered by various states and major municipalities, such as Baltimore, Philadelphia, and New York City. The book is expected to be available this spring. For more information, contact the NAHB at 15th & M Streets, N.W. Washington, DC 20005; 800/368-5242.

TAX

Club Expenses: How Much Is Deductible?

by Irving Blackman

If you are a member of a country club, tennis club, or other club at which you entertain potential or actual clients, can you deduct the membership costs? The answer is "Yes" — as long as most of your use is for business reasons, and as long as you keep careful records.

Here's how it works. To begin with, any one-time joining fee you pay cannot be deducted: it's considered a capital expenditure, and no portion of it is deductible, even if you use the club exclusively for business.

Annual membership dues are another story, however. As long as at least 51% of your use of the club is for business purposes, you can deduct the proportional amount as a business expense. (If you use it 50% of the time or less for business, you can't deduct anything.) But you must calculate your business percentage using strict IRS guidelines.

To begin with, count only the days you (or your family) actually use the club. Let's say you used the club 100 days, 60 of which were strictly business, 15 of which were both business and personal (you entertained customers while your family used the pool), and 25 days purely for you and your family.

The 15 combined business and personal days count as business days. Added to the 60 days of pure business use, that makes 75 business days, or 75% of the use. Therefore, 75% of your annual dues is deductible. You can also deduct 80% of the costs of meals that were business entertainment.

This is all for nothing, though, if you can't show which days were business. Keep a diary showing personal-use days and business days. For the business days, note the names of the customers you entertained and the business benefit you expected to get. This record-keeping should serve as adequate proof that the use is legitimate in case you are audited. Irving L. Blackman, CPA, J.D., is with Blackman Kallick Bartelstein, 300 S. Riverside Plaza, Chicago, IL 60606.

Insulation Update: Super Batts and Cotton Balls

From the familiar territory of fiberglass batts to the new world of cotton batts, the insulation industry is expanding its range with new products. This is a quick glimpse at two new insulation products. "Super batts" raise R-

"Super batts" raise R-values. Major fiberglass insulation manufacturers recently expanded the availability of higher density fiberglass batts, making them generally available nationwide through standard supply channels. These batts supply a few extra R's in the typical batt sizes, and are designed primarily for sidewalls and cathedral ceilings, where space often limits insulation levels.

For sidewalls, the new batts offer insulation levels of R-15 for a $3^{1}/2$ -inch space (up from R-11 or R-13), and R-21 for a $5^{1}/2$ -inch space. The new $5^{1}/2$ -inch batts retain their full R-21 value, unlike 6-inch R-19 batts, which actually function at R-18 when compressed into a $5^{1}/2$ -inch space.

For cathedral ceilings, the new 8½-inch batts give the same R-30 value found in standard 10-inch batts, while the 10-inch batts give the R-38 formerly found in 12-inch blankets. These products leave room for a ventilation space along the underside of sheath-

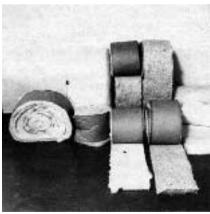
ing laid over standard 2x10 or 2x12 rafters.

These high density batts, says Mike Locker of CertainTeed Corporation, should help builders reach high insulation levels (sometimes specified by energy codes) more economically by reducing the need for wider framing or additional insulation layers. For more information, contact the Mineral Insulation Manufacturers Assn. (MIMA), 1420 King

last November.

Available now are 3½-inch R-13 batts; 6-inch R-19 batts; 8½-inch R-30 batts; and 10-inch R-38 batts. Pate says the product will be comparable to fiberglass batts in terms of price and method of handling.

"It cuts and works about like the fiberglass does," says Pate, "but you don't need to wear a mask or protective clothing. And Insul-Cot is only about 65% of the weight



Insul-Cot, a batt insulation made from cotton fibers, is one of several new insulation products recently made available.

St., Alexandria, VA 22314; 703/684-0084.

Cotton batts. Another recent development is cotton batt insulation. Insul-Cot, a batt made of 80% low-grade cotton and 20% polyester, was developed by Texas cotton farmer Joe Pate and Texas home builder Paul Muncrief. Their company, Cotton Unlimited, began producing the batts

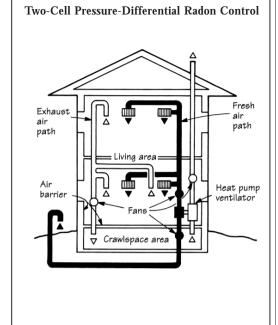
of fiberglass."

Pate says that transportation costs will limit initial distribution mainly to Texas. However, he hopes to open a plant in Arizona in 1992, and more plants in other regions as demand permits. For more information, contact Cotton Unlimited at Old Mill Rd., Post, TX 79356; 806/495-3501. □

Radon Mitigation Award Winner

Spokane, Wash., builder Mike Neuss won the 1991 Energy Efficient Building Association Design Competition Award with this novel approach to radon mitigation. The design prevents radon infiltration by dividing the house into two "cells": the main living area and a sealed crawlspace. A tightly constructed first-level subfloor with air barrier divides the two spaces. A mechanical ventilation system connects them, exhausting stale air from the living space and sending it to the crawlspace. The crawlspace is pressurized by the exhaust air to prevent radon entry.

Stale air from the crawlspace is circulated through a heat pump ventilator (HPV) before being exhausted out a roof vent. Meanwhile, fresh air pulled in from outdoors picks up the heat from the HPV before being blown into the living space. With R-60 second-floor ceiling, R-45 walls, an R-25 basement floor, and air barriers throughout, the house is also extremely energy-efficient.



Codes, continued

While the provisions are designed to benefit disabled persons, Johnson calls the approach "piecemeal. Wheelchairs may be able to move through the home, but chances are they won't make it in many bathrooms. Nor will disabled people function very well unless the home has an accessible kitchen."

Both regulations were proposed by the Board for the Coordination of Model Codes, a group composed of two individuals from each of the major code bodies. The board was formed to create symmetry among the various model codes. Critics of the group say it is biased and political. "They can ram through anything they want," says one source. NAHB's Johnson says the regulations were "riding on the coattails" of the 1990 Americans with Disabilities Act.

Either way, the new provisions will appear in the 1992 BOCA supplement. Builders in states and counties that choose to adopt these code changes will probably not feel the effects until at least 1993, since it takes most jurisdictions several months or years to amend their codes.

Other significant changes at recent code hearings:

 BOCA officials defeated a move to replace the code's energy provisions with those of the Council of American Building Officials (CABO) 1989 Model Energy Code (MEC). While both SBCCI and the International Conference of Building Officials (ICBO) reference the MEC (making compliance optional), BOCA's approval would have made the stringent energy code mandatory.

The MEC issue is likely to

resurface again, perhaps next year, says Ron Nickson, director of energy codes for the NAHB. As a result, the association is working with CABO to make the MEC provisions more consistent. "The way it stands now, it's very hard to follow," he says.

- BOCA voted to exempt two-story apartments or one-story apartments with basements from sprinkler requirements.
- Both BOCA and SBCCI adopted new seismic requirements for single family houses in high-risk areas, in accordance with the National Earthquake Hazard Reduction Program.
- ICBO's meetings last fall were "very quiet," says Jon Traw, vice president of codes and engineering. But look this fall for more regulations governing the use of wood shakes and shingles. ICBO publishes the Uniform Building Code, which is adopted by some western states where fires have been a serious problem. □

K&B Trends: White Walls, Wood Cabinets

A recent poll of 2,000 kitchen and bath designers conducted by the National Kitchen & Bath Association (NKBA) indicated that wood remains the most popular cabinet material for both kitchens (71%) and baths (63%). And the most popular color for kitchen and bath walls is basic white.

For kitchen counters, laminates were used 57% of the time, followed by solid surface (27%) and tile (7%). Bathroom counters used laminate 35% of the time, followed by solid surface (27%) and cultured marble (24%).

About a third of the baths were upscale, with separate tubs and showers and a third had more than one lavatory. Almost 30% had whirlpool tubs and 26% had a make-up/grooming center. But only 5% sported a bidet, and only 3% a sauna or media center. The average cost of a bathroom, both new and remodeled, stood at just over \$9,000.

Eat-in kitchens remain a popular item, with a separate table and chairs in half the new kitchens. Island and peninsula counters went into designs 39% and 33% of the time respectively.

Frequent amenities were pullout shelves (72%), tilt-down sink fronts (69%), pantry cabinets (50%), and pull-out waste baskets (46%). The average cost to a customer of the group polled was about \$18,100.

For more information, contact NKBA at 201/852-0033. □

Say What? Avoiding "Carpenter's Ear"

You don't hear it coming, and then you just don't hear. Of all the health risks faced by construction workers, noise-induced hearing loss, a cumulative and permanent loss due to repeated or long-term exposure to loud noises, is probably the least dramatic. There is no fall, no blood, no pain, and it usually takes years to show up. But once it does, it doesn't go away.

How it happens. When waves of sound strike the ear and pass into the ear canal, they cause the ear drum to vibrate. At the "Organ of Corti" deep within the ear, the waves generated by the ear drum move fine hairs at different speeds, depending on the frequency of the sound. These

damage

Protect your hearing. The first step toward saving your hearing is to buy quieter tools. If possible, compare noise levels at the store before you buy. In general, the heavier, well-built machines that last a long time also tend to be quieter.

Secondly, you should wear earplugs or earmuffs. Earplugs are lightweight, inexpensive, and, if you pick a soft or custom-fitted variety, quite comfortable. But they can be a nuisance if you're using your equipment intermittently and need to listen to conversation from co-workers.

Muffs are heavier, less comfortable, and more expensive. But you can hook them around your neck when you're

Noise Source and Intensity

dB	Noise Source	Relative Sound Intensity
140	Pain threshold	100,000,000,000,000
130	Pneumatic chisel	10,000,000,000,000
120	Repeated exposure causes damage Circular saw	1,000,000,000,000
110	Table saw Hammer drill	100,000,000,000
100	Belt sander Jigsaw	10,000,000,000
90	Electric drill Hand saw	1,000,000,000
80		100,000,000
70	Vacuum cleaner	10,000,000
60	Normal conversation	1,000,000
20	Whispering	100
10	Rustling leaves	10
0	Human hearing threshold	1

Every 10 decibels marks a ten-fold increase in sound intensity. Thus a 100-dB noise, such as a belt sander, is 10 times as intense as a 90-dB noise, such as that made by an electric drill. Extended or repeated exposure to sounds of 120 dB or louder can cause permanent damage.

hairs convert these vibrations into electrical impulses that the brain perceives as sound.

Excessive noise, unfortunately, destroys these hairs. The first to go are those that detect high-pitched sounds.

Some people are more sensitive to the damaging effects of noise than others. Also, the frequency of the noise is important: Loud, high-frequency sound (like a circular saw or a loud drill) causes hearing loss sooner than does low frequency noise of the same intensity.

At moderate noise levels, it may take years for significant hearing impairment to occur. This time is considerably shorter for exposure to noise greater than 120 dB; noises over 140 dB can cause immediate

not using your noisy equipment, allowing you to hear what others are telling you. Muffs will be more comfortable and more effective if the bumpers that form the seal with the ear are filled with fluid (glycerin) rather than foam.

rather than foam.

When buying any ear-protection device, look for the noise reduction rating (NRR) on the packaging. This is the approximate reduction in sound you can expect when the device is properly used. Look for an NRR of at least 25 decibels, which will cut a dangerous 120 decibels, for example, down to a safe 95.

— Theodore J. Fink, M.D., is an internist based in Shelburne, Vt., and an amateur wood-worker. Parts of this story are excerpted from Woodshop News.