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Builders Learn About Disaster Insurance the Hard Way

by John D. Wagner

With flooding in the Midwest, Hurricane Andrew rebuilds still under way in Florida, and some Oakland, Calif., fire jobs just getting started 23 months after the blaze, contractors nationwide are learning hard lessons from the insurance industry's adjusting and payout process. Behind the headline news of homes in splinters and damage in the tens of billions is a second disaster story — contractors mired in an insurance system unprepared for catastrophe. The biggest problems were caused by the sheer number and size of claims, which caught many insurance companies shorthanded. The resulting delays and paperwork runaround taught contractors at both ends of the country some important lessons.

Estimating time. In Florida, many homeowners shopped bids to fly-by-night outfits who charged flat fees for estimates that were unrealistic. This left many honest builders, who documented time spent estimating and charged fairly for it, holding the bag. "We had an established, quality builder down here," says Chuck Lennon, director of the Builders Association of South Florida, "who put out 97 bids for hurricane rebuilds and got three jobs."

The same thing happened to builders in California. After preparing 30 estimates, Paul Winans, a Bay Area builder, is currently doing two East Bay fire rebuilds, and is about to start a third. "The problem for me," says Winans, "was convincing insurance companies to put the proper value on my time, whether estimating or administering claims. That process has consumed me for the better part of a year. It's long hours."

Adjusting to adjusters. Many insurance adjusters who came from other regions of the country or from other industries were unaware of local labor and material costs. It took time for the adjusters to accept contractors' recommendations, says John Fels, a longtime Florida builder. "Since the insurance companies were overwhelmed," said Fels, "they depended on local builders with integrity and expertise to generate reasonable bids. In the end, they worked with us more than against us." In the meantime, however, builders faced long negotiations and delays.

FLORIDA CONCRETE & PRODUCTS ASSOC.

The sheer size and number of claims from Hurricane Andrew caught insurance companies shorthanded and complicated settlement negotiations.

In California, building costs that sometimes varied widely between neighboring towns made adjusters suspicious of contractors' bids. "It took several weeks for some out-of-town adjusters to believe they weren't getting ripped off," said Winans. "East Bay labor and material costs are markedly higher than regions as close as 70 miles away."

Even if they were working with an experienced adjuster, contractors discovered that the key to success was extensive documentation. One Bay area builder, David Gerstel,

continued

Lead Encapsulants No Easy Fix

The concept is simple: Use special paint-like coatings to seal lead paint in place rather than remove it. The coatings, called *lead encapsulants*, promised to be easy enough for the average tradesperson to apply, thereby saving everyone time and money while ensuring safety.

The technology, however, now appears to be anything but simple, and growing regulations are driving the cost of encapsulation almost as high as lead removal.

The Massachusetts Deleading Task Force, a leader in research on encapsulants, promised to issue standards by last June. But the standards won't be ready for another three to six months, and they may not hold much good news for ordinary builders.

When lead must be abated, current Massachusetts regulations give remodelers no choice but to have the material removed. This often involves trained technicians, toxic waste disposal, schedule delays, and a hefty cost of over $3,500 per building or apartment. In an attempt to find a cheaper alternative, some began looking at encapsulants.

But it now looks like the application of encapsulants may become as heavily regulated as deleading, requiring a certification and inspection program, with specially trained and licensed contractors, and state-certified products.

Why so much regulation? One reason is the complexity of the lead encapsulant specs, which are the responsibility of the Deleading Technology Task Force and ASTM. Writing performance specs is difficult, explains Thomas Melham, vice president of Surface Protection Industries, and a Deleading Task Force member. "It turns out the properties we require in an encapsulant can cause failures in the substrate." Because the encapsulants act as solvents, Melham says, a different spec is needed for each type of surface, including flaking and chipped paint, unstable wood, and painted wallpaper. "We have to be sure each is applied at the proper thickness," Melham says, "and under the proper conditions. And we have to ensure success in each case. It's not an easy task."

Because of the large number of contaminated houses and the high cost of treatment, there is no room for error. "Even if misapplied encapsulants fail at a rate of 1 in 20 homes," claims Brad Prenny, director of the Massachusetts Childhood Lead Poison Prevention Program, "that's 10,000 properties in Massachusetts alone. And that's unacceptable." Prenny believes, however, that even with the tighter regulations, encapsulants will reduce lead abatement costs 20% to 30% overall, and 50% in window abatement.

Others on the Task Force are still hoping for a simpler solution. "Encapsulants will work economically," says Paul Fisette, director of University of Massachusetts Building Materials Technology and Management Program, "if and only if we don't get tied up in regulation." Fisette understands the desire of the coatings industry to have certified professionals apply encapsulants because it lessens manufacturers' liability. The problem is "once [regulations] are in place, they are never removed, so we are choking ourselves."

With so many questions still unanswered about encapsulants, contractors who had looked to the technology as an off-the-shelf solution for lead liability are disappointed. For now, it looks like you should put away your paint brush, take out your check book, and get ready to pay the lead specialists. □

STATE BY STATE

New Hampshire. The Domtar Gypsum manufacturing plant in Newington has started a drywall waste recycling effort in conjunction with the University of New Hampshire and the Governor's Recycling Program. The manufacturer has developed methods to reuse clean drywall waste in the manufacture of new drywall. In addition to reducing landfill waste, builders can save up to half of their usual costs for disposing of drywall materials.

Vermont. The Vermont Dept. of Housing and Community Affairs has developed workshops to teach local zoning and planning offices how to identify and modify regulations that raise housing costs. Also, the land-use permit system is being reviewed by the governor and legislature to determine where amendments can be made that will create a more positive climate for affordable housing. The initiatives are part of a statewide effort to provide more affordable housing in accordance with the state's 1988 growth management program.

Massachusetts. Multiple pinhole leaks have sprouted in the copper tubing in at least 50 five-year-old homes in the Andover area. Town and state plumbing officials have investigated the homes and have determined that all were plumbed with copper tubing from Cerro Copper Products in East St. Louis., Ill. The state plumbing board is currently testing samples to determine whether the cause is a manufacturing defect or due to environmental stresses.

New Jersey. The state legislature is considering a bill (A-93) designed to streamline the rehab process by simplifying the code requirements for older buildings. Currently, rehab contractors must follow the Uniform Construction Code written for new buildings, which is often "cumbersome and costly," said bill sponsors Virginia Haines and David Wolfe (R-Ocean). □

New Concrete Heals Itself

The next generation of concrete may, like a living organism, have the capacity to heal its own wounds, according to a recent report in *The New York Times*. The concrete, being developed by Dr. Carolyn Dry at the University of Illinois, is still in the experimental stage — she estimates the research will take another two years and won't guess when the self-healing concrete might go to market.

The concrete has two main properties that allow it to heal its own cracks. First, the concrete mixture uses a new form of cement that responds to stress by forming many very tiny cracks rather than a few large ones. Second, when those cracks develop, they break open tiny hollow fibers that are distributed throughout the cement, containing an adhesive compound, which escapes to fill the tiny cracks. This not only makes those cracks structurally similar to the rest of the concrete, but prevents the intrusion of water that might later freeze and cause further cracking. □

TAX TALK

What Are Your Chances of Being Audited?

by Milton Zall

It is difficult to find trends in the number of IRS audits conducted each year because the official statistics lump together several different kinds of audits. For example, while it appears that the number of tax returns audited by the IRS has declined from more than 2% of total returns in 1980 to .8% in 1991, the number of "informational returns" has increased. Informational returns, such as forms 1099 provided by banks and businesses, are matched by computer against data supplied by individuals and businesses, and if there is a discrepancy, the taxpayer is asked to explain it. The increased reliance on automated procedures like this means that the IRS may still be investigating the same number of returns, but doing it in different ways.

Whether or not you are audited also depends in part on income. For individual returns in 1991, taxpayers with incomes under $25,000 were audited 40% less frequently than taxpayers with incomes between $50,000 and $100,000. Corporations with less than $250,000 in assets were audited about one-half as often as corporations with assets between $250,000 and $500,000. During the same period, type-S corporations and partnership returns were audited even less frequently.

Another way to gauge your chances of being audited is to compare the expenses reported on your return to the average amounts of business deductions claimed by taxpayers in the construction industry (see Table). According to Washington, D.C. tax attorney George Knox, although the IRS's audit selection criteria are a closely guarded secret, "It stands to reason that if your deductions fall outside the 'normal' range, you may have an increased chance of being audited." Knox cautions, however, that business expense deductions should be based on what the law allows, not statistics. "As long as you can document the deductions claimed on your tax return," says Knox, "you have nothing to fear." The other side of the coin is that if the amount claimed exceeds the norm and you can't document it, you're really asking for trouble. □

Milton Zall writes on tax and business matters from Silver Spring, Md.

Average Construction Industry Deductions

Deductions Claimed	% of Gross Receipts*
Cost of Goods Sold	42.0
Cost of Labor	8.0
Purchases	13.0
Materials & Supplies	14.9
Other Selling Costs	5.8
Advertising	.6
Vehicle Expenses	.4
Depreciation	6.0
Employee Benefits	.9
Insurance	3.3
Legal Services	.5
Meals & Travel	.3
Mortgage Interest	.4
Other Interest	1.0
Office Expenses	.4
Salaries	6.9
Equipment Rental	.9
Other Deductions	9.4
Net Income	17.4
Total Deductions	82.5

*Based on 1990 returns.

***Note:** If you claim deductions that significantly exceed the percentages given here, your chances of being audited might increase. The exceptions are "salaries" and "net income," which should not be much lower than the average.*

***Disaster,** continued*

prepared 100 to 150 pages of documentation for each of his two fire rebuilds. "If you have reasonable documentation," said Gerstel, "the adjuster can pass it up to the insurance company as justifiable. That's what they're looking for." The lesson: come prepared and keep track of your time.

Other lessons learned. Many builders hope that in the aftermath of these disasters, insurance companies will change the way insurance is written. Replacement costs need to be regionally indexed, and they must account for current real estate values, neighborhood by neighborhood. Adjusters need to be well-trained and aware of local costs. And builders and insurance clients must be able to count on consistent and predictable levels of expertise from insurance companies.

In the meantime, here are some tips to keep in mind if you find yourself involved in a disaster-related insurance bid:

- Insist on consistent representation. Some insurance companies play "revolving adjusters." After the contractor builds a relationship with one adjuster, the company sends a replacement. Then at wrap-up sessions, they put in a tough guy to play hardball.
- Make sure everyone is working from the same script. "When you start to move towards a settlement," warns Winans, "all parties have to agree on the next step. We'd go into meetings and say, 'OK, what's next?' They'd tell us, we'd do it, and then come back to find it wasn't necessary. Three weeks wasted!"
- Adversarial relationships don't help. The builder's attitude toward the process can affect the outcome of individual settlements. "There is no percentage in calling somebody a jerk and walking away," says Winans. "A constructive attitude had a lot to do with the settlement."
- Know where your money's coming from, warns Chuck Lennon. "Claim checks for mortgaged homes in Florida were made out to *mortgage holder* and *mortgagee*. Some of these mortgages were sold years back. Small mortgage service companies that were used to handling 200 inquiries a year were suddenly getting 200 a month. We had lots of problems with banks holding the money too long."
- Don't start building until the entire payment process is figured out, cautions Winans. "Otherwise be prepared to build with less cash. We didn't start any work until the clients got their *entire* settlement in order."
- Anticipate subcontractor delays. During the bidding process, even dependable subs may overcommit to work. Hold subs and suppliers to their promises by communicating with them more often.
- Plan for possible material shortages. This was a big problem right after the hurricane in Florida. Don't commit to a completion date without checking on availability of supplies. □

John D. Wagner, of Montpelier, Vt., frequently writes on building issues.

From What We Gather

A new "green" refrigerator that uses 25% less energy than comparable models and uses no CFCs will be introduced by Whirlpool early next year. Whirlpool collected $30 million in prize money for the invention from a group of utilities that offered what they called "the golden carrot" to whoever came up with the best design. Because the prize money helped offset R&D and startup costs, the new model should cost about the same as current ones. Utilities will benefit since refrigerators account for 20% of all household electricity.

Low-flow toilets using 1.6 gallons per flush saved about 10 gallons per day for each family member in a study conducted in Tampa, Fla. While the daily savings were less than the 14 to 18 gallons per person expected, Tampa city officials still plan to continue their rebate program, which pays up to $100 to families that replace their toilets with new low-flow models. The older toilets in the study averaged 3.8 gallons per flush, also less than expected.

Back pain lasting for a week or more was suffered by nearly one in five workers last year according to a recent report from the National Center for Health Statistics. The other leading problem was hand, wrist, and finger injuries, including carpal tunnel syndrome. These affected a full 22% of U.S. workers. The most common injuries were strains and sprains (28%); cuts and punctures (21%); and bruises and scrapes (13%). The figures were drawn from a survey of 44,233 adult workers.

Lower VOC limits for paints and stains nationwide will soon be announced by the EPA under the Clean Air Act. Similar regulations have been in place in Southern California, New York, and New Jersey for a few years. Low-VOC coatings are thicker, less penetrating, and slower to dry. Wider use of water-based products is expected.

Loans to buyers of manufactured homes is a booming business for Green Tree Financial Inc. Green Tree, based in St. Paul, Minn. and the nation's leading lender for manufactured homes, reported a 45% surge in new loans in the first quarter, while sales of new conventionally built homes grew only modestly. Most manufactured home buyers finance through dealers, who maintain relationships with lenders such as Green Tree. □

Shingle Quality Issue Still Unresolved

After a year of joint studies, roofing contractors and shingle manufacturers are not yet close to an agreement on how to correct a reported cracking and splitting defect observed in many asphalt fiberglass shingles (see "Choosing an Asphalt Shingle: Organic vs. Fiberglass," 5/93).

Representatives of the Western States Roofing Contractors Association (WSRCA) and of the Asphalt Roofing Manufacturers Association (ARMA), have been cooperating in a laboratory testing program looking for causes and cures for the problem.

As promised, ARMA, which represents 18 shingle manufacturers, presented its results at this June's WSRCA convention in Las Vegas. Joe Jones, who heads the ARMA task force on the cracking problem, told the roofers that shingle splitting occurs primarily because of thermal stress caused by rapid temperature drops. Jones' report, which was based on computer simulations and results from tests on sample shingles, recommended testing shingles for tensile strength and elongation, tensile cyclic fatigue, and thermal stress. But it did not present a final standardized test method or recommend specific minimum standards for any of these properties. Jones said those details remain to be worked out among the members of ARMA. Test results of specific brand names were not released.

The roofers were disappointed with ARMA's presentation. "They did respond," said Robert LaCosse, a technical consultant for the contractor's association, "but not like they were supposed to." What the roofers did not get was a hoped-for battery of new lab test techniques to predict actual field performance of particular shingle types. "We still don't know what the properties are, what to look for, and the rest," said Sam Abdulaziz, a construction attorney working with WSRCA's shingle task force.

In a post-convention press release, WSRCA called on the shingle makers to stand behind their warranty and, "if their product does not meet the promises, upgrade the product, change the warranty, or take the so-called 'twenty-year shingle' off the western market."

Concerned that shingle installers could wind up paying for roof repairs or replacement even when shingle quality — not installation — causes a roof failure, WSRCA has prepared a rubber-stamp containing a disclaimer that attempts to separate the roofers' responsibilities from those of the manufacturers. For further information, call WSRCA at 415/588-9722. □

Solar Innovation for Commercial Buildings

A genuine advance in solar energy? By all accounts, the Solarwall system, manufactured by Conserval Systems, in Buffalo, N.Y., seems to be just that: low cost, low maintenance, winner of an ASHRAE award and enthusiastic reviews by the U.S. National Renewable Energy Laboratory.

Looking very much like normal steel cladding, the system serves double duty as both an exterior wall finish and a ventilation pre-heating system. Sunlight heats up the dark-colored siding — typically blue, black, brown, or green. Fresh air is drawn through tiny holes in the siding into a cavity, where it is warmed — typically 10° to 15°F — and is blown into the building by a fan. Flexible distribution ducts are used for open floor plans such as warehouses, or the Solarwall can connect directly into an hvac fresh air intake. It has an automatic bypass for summer operation. Incoming fresh air also picks up heat normally lost through the outside wall by conduction, allowing the system to save Btu's in cloudy weather and even at night.

Dozens of systems have been installed in the U.S. and Canada since 1990, with retrofit paybacks estimated at three to five years. Solarwall has thus far usually been installed over brick or block walls in commercial and industrial buildings. It is also available without perforations for covering a building's non-south sides. □

— David Kaufman is an energy consultant in Brunswick, Maine.

NATIONAL RENEWABLE ENERGY LABORATORY

Fresh air passing through hundreds of tiny perforations in a Solarwall panel is preheated before entering the building.